LOREX®

VIEW YOUR WORLD®

WIRELESS HOME MONITORING SYSTEM

USER'S GUIDE

ENGLISH VERSION 3.0

LIVE

LW2730/LW2930 SERIES

www.lorextechnology.com

Thank you for purchasing the Lorex wireless video monitoring system.

This manual refers to the following models:

- LW2730 Series (7‘‘ wireless monitoring system)
- LW2930 Series (9‘‘ wireless monitoring system)

For the latest online manual, downloads, and product updates, and to learn about our complete line of accessory products, please visit our website at:

www.lorextechnology.com

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RICK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products ' enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

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NEED HELP?

CONTACT US FIRST

DO NOT RETURN THIS PRODUCT TO THE STORE

Please make sure to register your product at www.lorextechnology.com to receive product updates and technical support.

2 Easy Ways to Contact Us

Online:

Product Support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at **www.lorextechnology.com/support**

For all other matters, visit **www.lorextechnology.com**

By Phone:

North America:

Customer Service (for warranty matters): **1-888-425-6739** (1-888-42-LOREX)

Tech Support (for technical/installation issues): **1-877-755-6739** (1-877-75-LOREX)

Mexico: **001-800-681-9263, 001-800-514-6739**

International: **+800-425-6739-0** (Example: From the UK, dial 00 instead of +)

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¿NECESITA AYUDA?

COMUNÍQUESE PRIMERO CON NOSOTROS

NO DEVUELVA ESTE PRODUCTO A LA TIENDA

Por favor, registre su producto en www.lorextechnology.com para recibir actualizaciones del producto y asistencia técnica.

Hay 2 maneras fáciles de comunicarse con nosotros:

En línea:

Apoyo al cliente está disponible 24/7, incluyendo información del producto, manuales para el usuario, guías de inicio rápido y preguntas más frecuentes en:
www.lorextechnology.com/support

Para todo lo demás, visite
www.lorextechnology.com

Por teléfono:

Norte América:
Atención al cliente (para asuntos de la garantía - garantía válida sólo en E.U.A., vea la garantía ofrecida por el importador):
1-888-425-6739 (1-888-42-LOREX)
Asistencia técnica (para asuntos técnicos o de instalación):
1-877-755-6739 (1-877-75-LOREX)

Teléfono y Servicios Válidos Sólo en E.U.A.:
001-800-681-9263, 001-800-514-6739

Internacional: **+800-425-6739-0**

BESOIN D'ASSISTANCE?

COMMUNIQUEZ D'ABORD AVEC NOUS

NE RETOURNEZ PAS CE PRODUIT AU MAGASIN

Veuillez enregistrer votre produit sur le site www.lorextechnology.com afin de recevoir des mises à jour et le soutien technique pour votre produit.

2 façons simples de communiquer avec nous :

En ligne :

À votre disposition 24/7, le soutien pour les produits comprend les renseignements sur les produits, guides d'utilisation, guides de départ rapide et FAQ :
www.lorextechnology.com/support

Pour toutes les autres questions,
visitez **www.lorextechnology.com**

Par téléphone :

En Amérique du Nord :
Service à la clientèle (pour tout ce qui concerne la garantie) :
1-888-425-6739 (1-888-42-LOREX)
Soutien technique (pour les questions d'ordre technique ou relatives à l'installation) : **1-877-755-6739** (1-877-75-LOREX)

Mexique : **001-800-681-9263, 001-800-514-6739**

International : **+800-425-6739-0**
(par exemple : à partir du Royaume-Uni, composez le 00 au lieu de +)

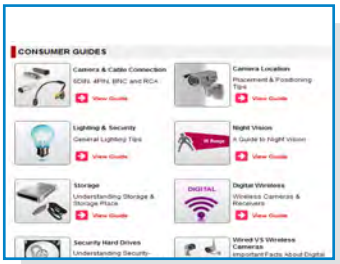
BEFORE YOU START

Please make sure to register your product at www.lorextechnology.com to receive product updates and technical support

THIS PRODUCT MAY REQUIRE PROFESSIONAL INSTALLATION

LOREX IS COMMITTED TO FULFILLING YOUR SECURITY NEEDS

- We have developed user friendly products and documentation. Please read the Quick Start Guide and User Manual before you install this product.



- Consumer Guides and Video Tutorials are available on our web site at **www.lorextechnology.com/support**

- If you require further installation assistance, please visit **www.lorextechnology.com/installation** or contact a professional installer.

- Please note that once the components of this product have been unsealed, you cannot return this product directly to the store without the original packaging.

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AVANT DE COMMENCER

Veuillez enregistrer votre produit sur le site www.lorextechnology.com afin de recevoir des mises à jour et le soutien technique pour votre produit.

CE PRODUIT PEUT NÉCESSITER UNE INSTALLATION PROFESSIONNELLE

LOREX S'ENGAGE À RÉPONDRE À VOS BESOINS EN MATIÈRE DE SÉCURITÉ

- Nous avons conçu et développé une documentation et des produits extrêmement conviviaux. Veuillez lire le Guide de départ rapide et le Guide d'utilisation avant d'installer ce produit.
- Des guides pour consommateurs et des tutoriels vidéo vous sont offerts sur notre site Web : www.lorextechnology.com/support
- Si vous avez besoin de plus d'assistance pour l'installation de ce produit, veuillez visiter le site www.lorextechnology/installation ou communiquez avec un installateur professionnel.
- Veuillez prendre note que lorsque vous avez déballé les pièces et composantes de ce produit, vous ne pouvez pas retourner celui-ci directement au magasin sans son emballage original.

ANTES DE EMPEZAR

Cerciórese de por favor colocar su producto en www.lorextechnology.com para recibir actualizaciones y la información del producto y soporte técnico.

ESTE PRODUCTO PUEDE EXIGIR UNA INSTALACIÓN PROFESIONAL

LOREX SE COMPROMETE A SATISFACER SUS NECESIDADES EN SEGURIDAD

- Favor de leer la guía de instalación rápida y la guía del usuario antes de instalar este producto.
- Puede conseguir las guías del consumidor y los cursos en enseñanza video sobre el Internet visitando www.lorextechnology.com/support
- Si necesita ayuda para la instalación, visite www.lorextechnology.com/installation o contacte un especialista en instalaciones.
- Favor de notar que una vez que los componentes de este producto han sido removidos del embalaje, no podrá devolver este producto directamente a la tienda.

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VANTAGE

Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacture process of your product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to ensure your enjoyment and proper use of the product and accessory equipment. Please read them carefully before operating and using your product.

General Precautions

1. All warnings and instructions in this manual should be followed.
2. Do not use receivers or video monitors in humid or wet places.
3. Keep enough space around the product for ventilation. Slots and openings in the storage cabinet should not be blocked.
4. It is highly recommended to connect the product to a surge protector to protect from damage caused by electrical surges. It is also recommended to connect the product to an uninterruptible power supply (UPS), which has an internal battery that will keep the product running in the event of a power outage.
5. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning.

Installation

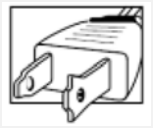
1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the product is operated. Follow all operating instructions.

2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.

3. **Heed Warnings** - Comply with all warnings on the product and in the operating instructions.

4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

   A polarized plug has two blades with one wider than the other.

   A grounding type plug has two blades and a third grounding prong.

   The wide blade or the third prong are provided for your safety.

   If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

5. **Power Sources** - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your location, consult your video dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

6. **Overloading** - Do not overload wall outlets or extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.

7. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

8. **Surge Protectors** - It is highly recommended that the video equipment be connected to a surge protector. Doing so will protect the equipment from damage caused by power surges. Surge protectors should bear the UL listing mark or CSA certification mark.

9. **Uninterruptible Power Supplies (UPS)** - Because this product is designed for continuous, 24/7 operation, it is recommended that you connect the product to an uninterruptible power supply. An uninterruptible power supply has an internal battery that will keep the product running in the event of a power outage. Uninterruptible power supplies should bear the UL listing mark or CSA certification mark.

   Caution: Maintain electrical safety. Power line operated equipment or accessories connected to this product should bear the UL listing mark or CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.

Installation (Continued)

10. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the product manufacturer's instructions have been followed.

11. **Attachments** - Do not use attachments unless recommended by the product manufacturer as they may cause a hazard.

12. **Water and Moisture** - Do not use receivers or video monitors near water — for example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

13. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

14. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the product. Use this product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.

15. **Camera Extension Cables** – Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.

16. **Mounting** - The cameras provided with this system should be mounted only as instructed in this guide or the instructions that came with your cameras, using the provided mounting brackets.

17. **Camera Installation**- Cameras are not intended for submersion in water. Not all cameras can be installed outdoors. Check your camera environmental rating to confirm if they can be installed outdoors. When installing cameras outdoors, installation in a sheltered area is required.

Service

1. **Servicing** - Do not attempt to service this video equipment yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

2. **Conditions Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

   A. When the power supply cord or plug is damaged.

   B. If liquid has been spilled or objects have fallen into the product.

   C. If the product has been exposed to rain or water.

   D. If the product has been dropped or the cabinet has been damaged.

   E. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

   F. When the product exhibits a distinct change in performance. This indicates a need for service.

7. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the product manufacturer can prevent fire, electric shock, or other hazards.

8. **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in safe operating condition.

Use

1. **Cleaning** - Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

2. **Product and Cart Combination** - Product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

3. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

4. **Lightning** - For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power line surges.

⚠ WARNING

STRANGULATION HAZARD: Infants have STRANGLED in power cords. Keep power cords more than 3 feet away from cribs, bassinets, play yards, and other safe sleep environments for infants.

NOTICES

FCC Notice:
This equipment has been certified and found to comply with the limits regulated by the FCC part 15, subpart C. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for assistance

Warning:
To ensure compliance with the FCC's RF exposure guidelines, this equipment should be installed and operated with minimum distance 20cm (7.87in) between the radiator and nearby persons.

Industry Canada Notice:
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1)This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesirable operation.

This Class B digital apparatus complies with Canadian ICES-003.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

MODIFICATION:
Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Toute modification non approuvée explicitement par le fournisseur de licence de l'appareil peut entraîner l'annulation du droit de l'utilsateur à utiliser l'appareil.

RoHS:
This product is fully compliant with the European Union Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment ("RoHS") Directive (2002/95/EC). The RoHS directive prohibits the sale of electronic equipment containing certain hazardous substances such as lead, cadmium, mercury, and hexavalent chromium, PBB, and PBDE in the European Union.

It is imperative that the user follows the guidelines in this manual to avoid improper usage which may result in damage to the product, electrical shock, and fire hazard injury. In order to improve the features, functions, and quality of this product, the specifications are subject to change without notice from time to time.

Features

- 7"/9" digital LCD display[1]
- Simple installation. No video cables required[2]
- Integrated digital video recorder
- Multiple recording options: manual, motion or schedule[3]
- Time and date stamped recordings for easy retrieval
- Front panel feather touch controls
- Dual motion sensing technology with sensitivity level settings
- Digital picture frame with the ability to upload your own pictures for discreet monitoring[4]
- Review recordings and watch live video at the same time with Picture-In-Picture feature
- Built-in camera light filter provides accurate color reproduction in all lighting conditions
- 2-Way Audio for Intercom usage
- Night viewing up to 40ft (12m) away[5]
- Install cameras indoors or outdoors[6]
- View up to 4 cameras at the same time or in sequence
- Up to 180ft indoor/650ft outdoor wireless range[7]
- AV Output for viewing on a larger screen (e.g.,TV)
- Tabletop, wall or under-counter mountable monitor
- View remotely via Skype™*

1. LCD display size varies depending on model.
2. Cameras require a local power outlet.
3. Local viewing up to 4 cameras simultaneously. Local recording and playback of one camera at a time or all 4 cameras simultaneously on one screen (Quad view).
4. Ability to upload your own pictures supported using a PC only. Default covert function (blank screen) available as an alternative option.
5. Stated IR Illumination range is based on ideal conditions. Actual range and image clarity depends on installation location, viewing area and light reflection/absorption level of object.
6. Weather-resistant. Not intended for direct exposure to rain or snow. For outdoor applications install under shelter protected from the elements.
7. Based on line of sight. Actual range will vary depending on obstructions.

* No recurring charges. Internet connection required on connected PC. Remote connection requires driver installation on home PC (CD included), a wired USB connection between the monitor and PC (USB cable included) and a high speed internet connection. PC must be turned ON and Skype™ application must be running. Remote viewing is limited to a single camera and is not selectable remotely. When remotely connecting to your video monitor using Skype, **audio monitoring, audio recording, and video recording are disabled**.

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Getting started

The system includes the following components:

Two-way audio outdoor cameras*

LCD monitor / wireless receiver*

Power adapters for receiver and camera*

SD memory card**

AV cable

microUSB cable

Camera mounting stand*

Under the counter mounting kit

Wireless antennas (for receiver and cameras)*

Mounting kit(s)*

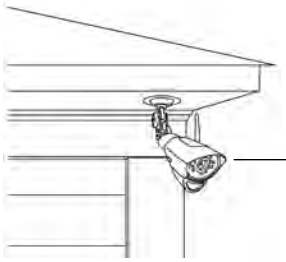
CD

*Configuration may vary by model.
**Optional SD card. Consult your package for content details.

CAMERA CONFIGURATION, MONITOR SIZE, AND NUMBER OF ACCESSORIES MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC DETAILS.
CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM.

Installing the camera

Cameras are suitable for outdoor installation, but are weather resistant, not weather proof. **Cameras are not intended for direct exposure to rain or snow.** For outdoor applications, install under shelter protected from the elements, such as beneath roof eaves. The diagram below shows an example of an ideal location for outdoor placement.



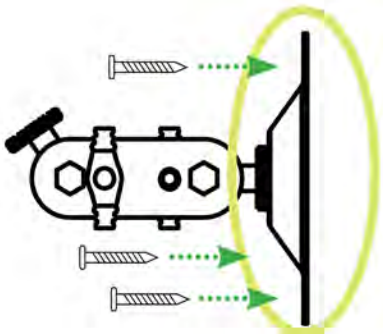
Example ideal outdoor location

Installation Tips:

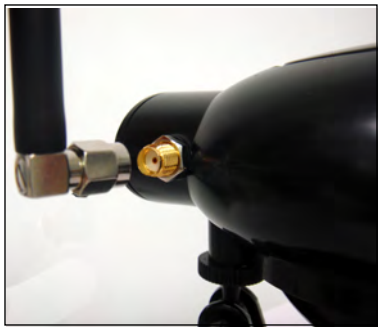
- Before you install the camera, plan where and how it will be positioned, and where you will route the cable that connects the camera to the power adapter.
- Before starting permanent installation, have another person check the camera image on the monitor when camera is positioned in the same place it will be permanently installed.
- It is recommended to ensure a clear line-of-sight between the camera and receiver and to limit the amount of obstructions, such as walls and tree branches, between the camera and receiver. Walls made of heavy building materials such as brick or concrete will significantly reduce signal range.
- If the signal will have to pass through a wall, placing the receiver or camera next to a window will improve the signal strength.
- Do not install the camera pointing out of a window. The nighttime picture will be unusable due to reflection from the night vision LED's.
- The cameras are pre-paired so they work out of the box. Each camera has a channel number sticker indicating what channel they are paired to. If you have purchased additional cameras, you will need to pair them to the receiver, see "Pairing/adding cameras" on page 33.

To install the camera:

1 Use the included mounting screws to mount the stand to the mounting surface:
- Mark the position of the screw holes on the wall.
- Drill holes and insert the drywall plugs as needed.
- Firmly attach the stand to the wall using the provided screws.



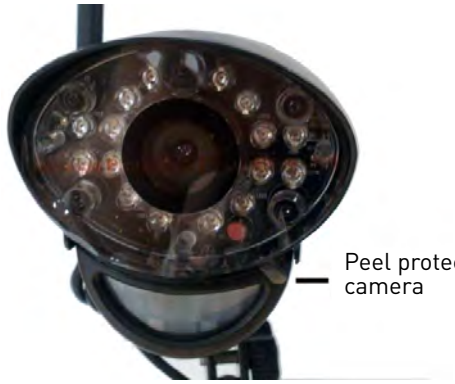
2 Twist the antenna clockwise onto the antenna port on the side of the camera.



3 Attach the camera to the mounting stand. Adjust the angle of the camera until the desired view is set. Tighten the thumbscrews to secure the desired camera position.

4 Connect the black power cable extending from the camera to the cable of the power adapter, and plug in the power adapter to an outlet or surge protector. **Make sure the power connector is fully pushed in to avoid water getting in the plug.**

5 Remove the protective film from the front of the camera. If the film is not removed, it will block the built-in microphone and potentially affect the quality of the picture.



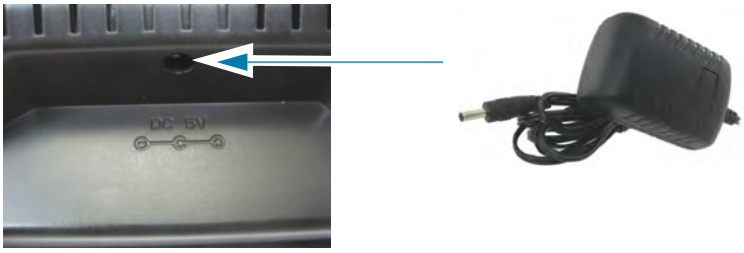
Setting up the receiver

Step 1 of 3: Installing the antenna

Twist the antenna clockwise onto the receiver's antenna jack located on the back of the receiver.

Step 2 of 3: Turning on the receiver

1 Connect the cable from the power adapter to the **5V DC** port on the bottom panel of the receiver. Plug in the power adapter to an outlet or surge protector.



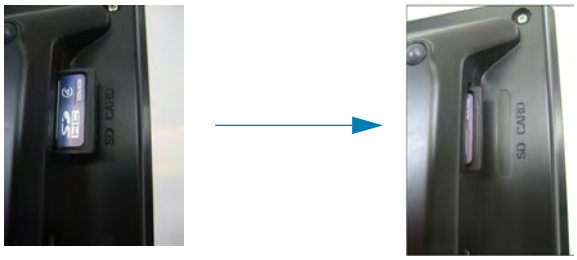
2 Slide the power switch on the rear panel to the "**ON**" position.

Tips:

- Place the receiver in a location that will have a clear reception to your camera. Try to maintain line-of-sight and minimize the number of obstructions between the camera and receiver.
- Adjust the antenna on the receiver as necessary to provide the clearest reception.

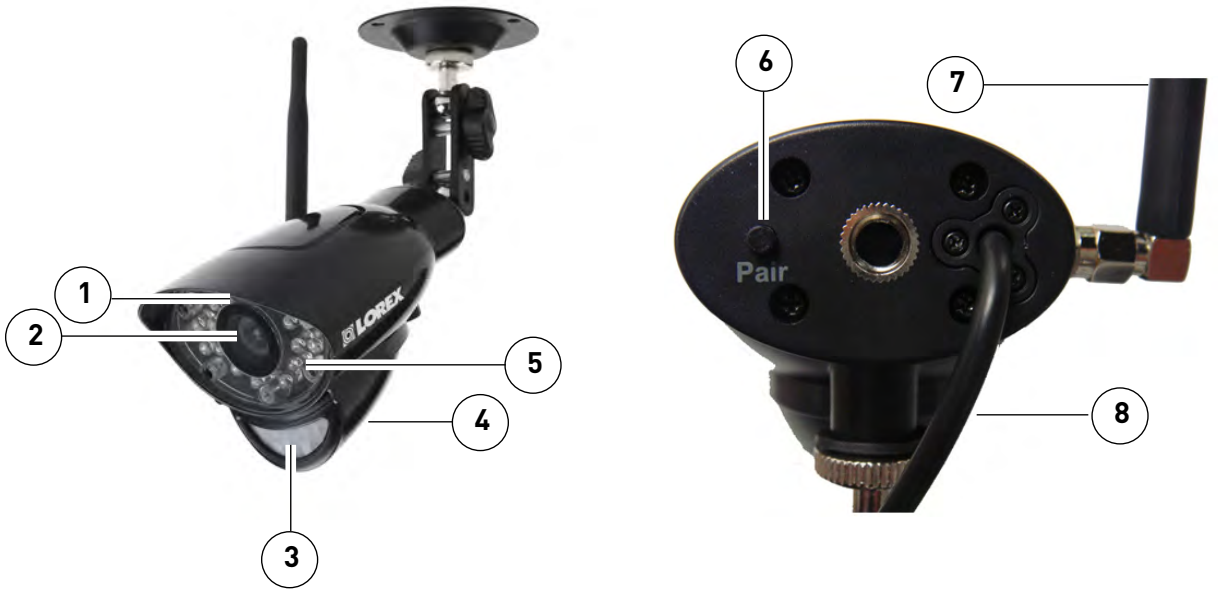
Step 3 of 3: Inserting the SD card

The SD card allows you to store video footage captured by the camera. Push the SD card into the SD card slot on the LCD receiver until you hear a "click." The card will not be flush when completely inserted.



NOTE: The receiver is compatible with most major brands of SD card up to 32 GB. For recording times on SD cards, see "Minimum recording times on SD cards" on page 15.

Camera overview



1 **Microphone:** Built-in microphone.

2 **Lens:** Camera lens.

3 **PIR Sensor:** Passive IR motion sensor.

4 **Speaker:** Speaker for intercom.

5 **Night Vision IR:** Night vision IR LEDs.

6 **Pair:** Pairing button. For more details, see “Pairing/adding cameras” on page 33.

7 **Antenna:** Wireless antenna.

8 **Power Cable:** Connect the included power adapter to the cable extending from the camera.

ATTENTION

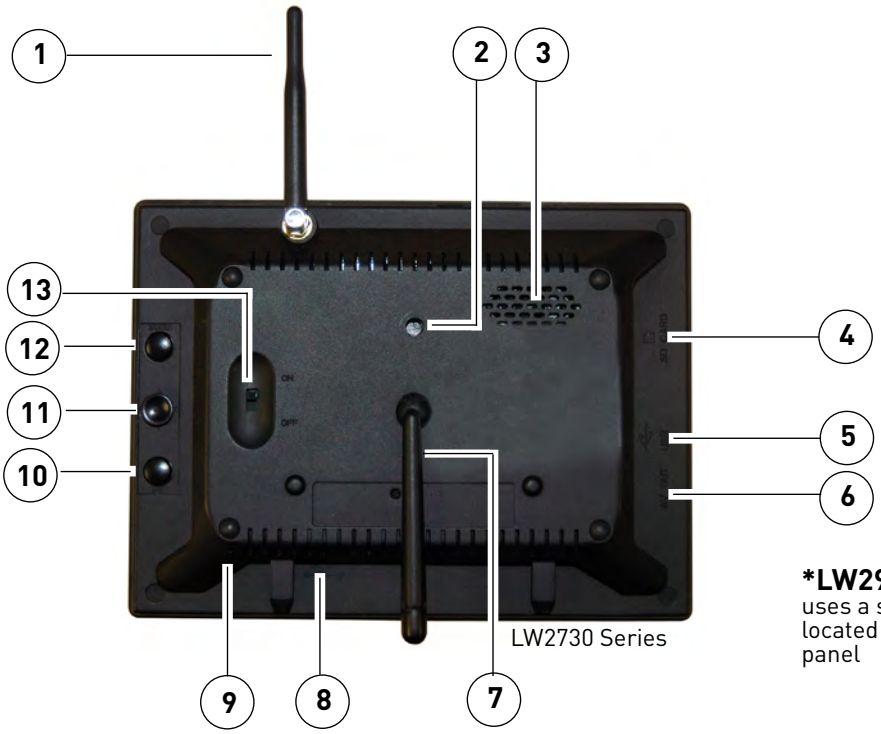
This camera includes an Auto Mechanical IR Cut Filter. When the camera changes between day mode and night vision mode, an audible clicking noise may be heard coming from the camera. This clicking is normal, and indicates that the camera filter is working.

Receiver overview

Front panel buttons

Button	Function
: Motion Recording	Activate/deactivate Motion Recording.
: Manual Recording	Start/stop Manual Recording.
: Menu	Open Main Menu. Return to previous menu / exit menus.
V- / V+ **: Volume Control**	Increase / decrease volume on receiver. Scroll left / right in menus.
/ : Channel Select	Change channel. Scroll up / down in menus.
OK **: OK**	In menus, confirm selection. While viewing, open Playback mode to view recorded video or uploaded images.
: Quad / Sequence Mode	Switch between Sequence and Quad (4-channel) viewing mode.
: Screen Saver Mode	Activate/deactivate Screen Saver mode. see “Screen Saver (digital picture frame) mode” on page 28.
: Talk	Activate Intercom (2-way-audio).

Back of receiver



***LW2930 Series**
uses a slide switch located on the side panel

1 **Wireless Antenna:** Position the antenna as needed for best reception.

2 **Mounting Hole:** Attach the included under-the-counter mount to mount the LCD receiver underneath a counter/cupboard or to a wall.

3 **Speaker:** Speaker for two-way audio.

4 **SD Card Slot:** Insert up to a 32GB SD card.

5 **USB Port:** Used for Skype connectivity. For details, see "Viewing your camera remotely using Skype™" on page 38.

6 **AV OUT:** Connect the Audio/Video cable to view video on an external TV or monitor (optional).

7 **Receiver Stand**

8 **Power Input (DC5V):** Connect the included power adapter.

9 **Microphone:** Microphone for two-way audio.

10 **AV:** Press to send the image to a connected TV or monitor (AV cable required).

NOTE: Screen Saver mode is not available if using AV-out.

11 **Joystick:** Deletes files during Playback mode. See "Deleting video or image files" on page 25.

12 **ZOOM:** Press to enable/disable Digital Zoom mode.

13 **Power**: Slide switch to turn the LCD receiver ON/OFF*.

LED Indicators on the LCD receiver

Use the LED indicators on the LCD receiver to observe the status of the receiver, cameras, and SD card.

The blue lights indicate the following:

- **NEW:** A new video file has been recorded to the SD card.
- **FULL:** The SD card is full.

NOTE: The "Full" light will only appear if Overwrite is disabled. For details, see “Enabling/disabling overwrite” on page 22.

- **MOTION:** Motion detection recording is enabled.
- **SCAN:** Screen Saver mode ("Scan" mode) is enabled.

Using the system

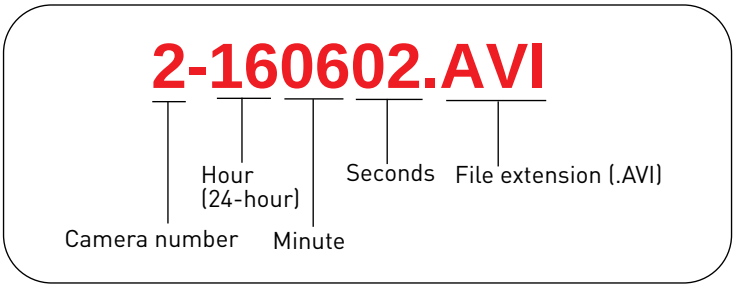
By default, the camera(s) included with your system are automatically paired to the wireless receiver. The camera(s) and receiver will communicate with each other once they are powered on.

NOTE: Power on the cameras before powering on the receiver.

Understanding the on-screen display

With camera 1 properly connected and powered on, the system displays a single channel full-screen live view of the camera.

1 **File Name:** The name of the file currently being recorded. This file will appear in the file list on the SD card. The Recording File stamp indicates the hour, minutes, and seconds that the system started recording.

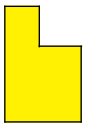


2 **Signal Indicator:** The signal indicator shows the strength of the signal being received from the camera. The number of bars in the Signal Indicator shows the strength of the signal. One, or no bars indicates the signal is poor, and 4 bars indicate a very strong signal. The signal indicator is not shown during quad mode.

NOTE: If the signal is low (e.g.,1 or 2 bars) adjust the antennas, or reposition the cameras or receiver for best performance.

3 **Camera indicator:** Displays the camera you are presently viewing.

4 **File Icon:** Flashes yellow when writing data to the SD card.



SD card writing data

5 **SD Card icon:** A white "SD" icon displays that an SD card is inserted in the wireless receiver. A red icon indicates the SD card is full.

6 **Overwrite icon:** Indicates Overwrite mode is on, which means the system will overwrite the oldest recordings when the SD card is full. For details, see "Enabling/disabling overwrite" on page 22.

7 **Power Failure icon:** Indicates a power failure has occurred on the system during recording. You may need to manually restore recording/viewing modes on the system, and recordings up to 10 minutes before the power failure occurred will not be saved. For more details, see "Power failure indicator" on page 59.

8 **Recording Indicator:** "REC" appears when recording is in progress.

9 **Time Stamp:** The current date and time on the system.

Navigating menu screens

Use the system menus to configure settings.

- Press to open the Main Menu.
- Press / to move the cursor left and right.
- Press / to move the cursor up and down.
- Press **OK** to open sub-menus and confirm/save menu selections.
- Press to exit menus without saving changes.

Main Menu

Viewing modes

There are four different viewing modes available on the system: single channel viewing, Auto Sequence Viewing mode (view individual channels automatically in sequence), Quad mode, and Screen Saver mode (for details, see "Screen Saver (digital picture frame) mode" on page 28).

To change viewing modes:

- Press to select between Quad mode and Auto Sequence viewing mode.

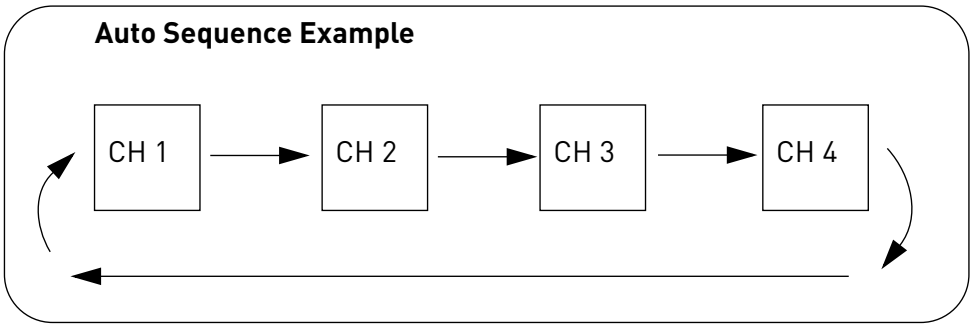
OR

- Press / to switch between channels 1~4 in single channel view.

NOTE: By default, Auto Sequence Viewing mode is enabled when you first power on the system, and when you exit Screen Saver mode.

Auto Sequence Viewing mode

Auto Sequence Viewing Mode switches between connected channels in full-screen.

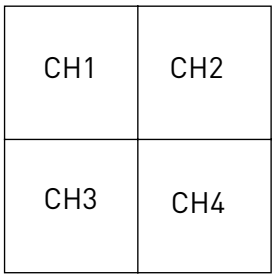


To enable Auto Sequence:

- Press until a single channel is shown on screen. The monitor automatically switches through connected channels.

Quad mode

Use Quad mode to view up to four cameras simultaneously.



Quad mode

To select Quad mode:

1 Press .

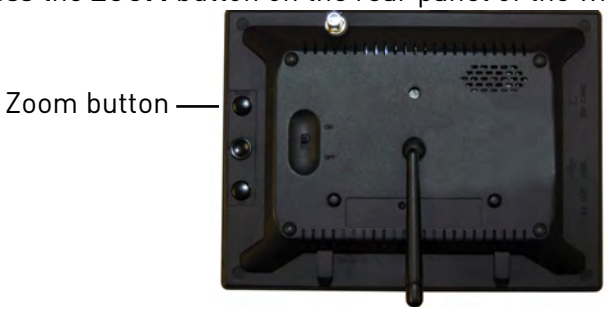
NOTE: Using Quad mode with Motion Recording is a useful recording mode because it allows you to record the entire screen (up to 4 cameras) when motion is detected by one of the cameras. For more details, see "Motion recording" on page 19.

Digital Zoom

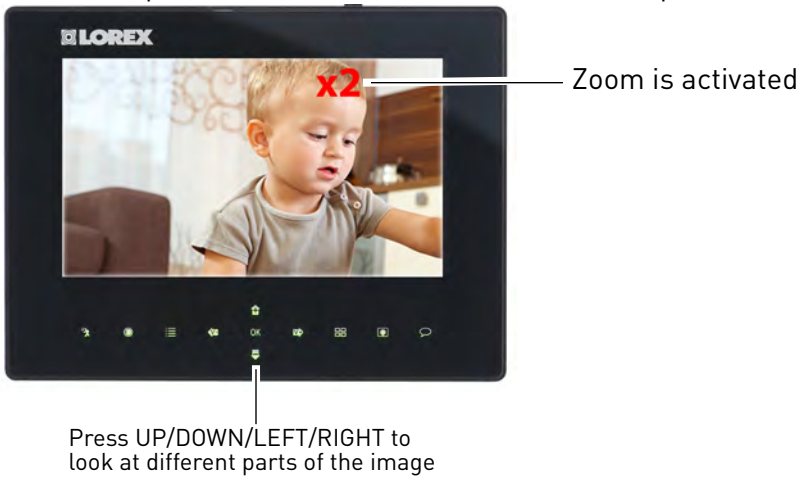
The Digital Zoom feature allows you to zoom in 2x on your cameras during live viewing. This is useful if you need a closer look at something happening far away from the cameras.

To use digital zoom:

1 Select the desired camera in full-screen mode (press UP/DOWN to select the channel) and press the **ZOOM** button on the rear panel of the wireless receiver to zoom in.



2 When Digital Zoom is activated, a x2 icon appears on the screen. Press **UP/DOWN/LEFT/RIGHT** on the front panel of the monitor to look at different parts of the image.



3 Press the **ZOOM** button again to exit digital zoom.

Using the Intercom (two-way audio)

Use the Intercom feature for two-way communication between the wireless receiver and the camera. Talk to the person at the camera from behind closed doors for added security.

NOTE: Please make sure the camera(s) is properly connected prior to using the Intercom.

To use the Intercom:

1 Select the desired camera in full-screen mode (press UP/DOWN to select the channel) and press and hold the button. An audio icon appears on-screen.

2 Talk in a normal speaking voice close to the LCD screen (approximately 12 in. / 30 cm).

3 Release the button to hear a response from the camera.

Two-way audio volume

The two-way audio volume is different from the alarm/buzzer volume found in the Main Menu (→**Settings→Alarm Volume**).

To change two-way audio volume:

- From live viewing, press V+ to increase the system volume or press V- to decrease the system volume.
- The volume icons on the screen indicate the volume of sound coming from the cameras.

NOTE: You cannot adjust the volume of the camera speakers.

Using AV output

Use the included AV cable to connect the system to a TV for viewing on a larger screen

To enable AV output:

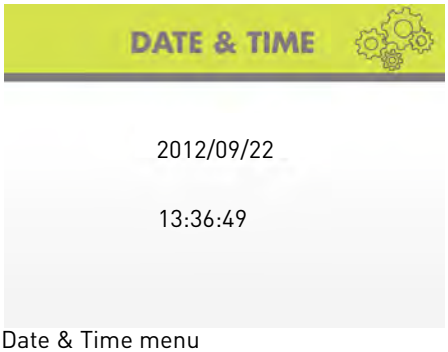
1 Connect the single end of the AV cable to the **AV Out** port on the rear panel of the wireless receiver. Connect the yellow and white RCA ends to matching inputs on your TV. Select the corresponding input on your TV (commonly referred to as AV, Input, Video, etc.).

2 Press the **AV** button on the rear panel to switch the wireless receiver to AV mode. The monitor will turn off. After a few seconds, the image from the monitor will be displayed on the TV.

NOTE: If you need to change the AV output to PAL format (for European TV's), see "Video Output" on page 34.

Setting the time

It is highly recommended to set the time on the system prior to recording. You need to set the correct date and time in order to use Schedule Recording.



Date & Time menu

To set the time:

1 Press to open the main menu. Press left and right to select **Settings** and press the **OK** button.

2 Select **Date & Time** and press the **OK** button.

3 Press **RIGHT/LEFT** to move the cursor; press **UP/DOWN** to change the year, month, day, hour, minutes, and seconds.

NOTE: The system uses a 24-hour clock only.

4 Press **OK** to save your settings.

5 Press to close any remaining menu windows.

NOTE: There is no daylight savings time (DST) setting on the system. DST must be set manually if necessary.

Date and time

Recording

The following recording modes are available on the system: Manual Recording, Schedule Recording, and Motion Recording. The system can record video to an SD card one channel at a time or record the entire screen in Quad mode.

Recording prerequisites

- An SD card must be inserted in the wireless receiver in order to record. You should always format the SD card prior to initial recording. For details, see "Format Memory" on page 35.

NOTE: Recording overrides other actions on the receiver. You must stop recording on the system in order to perform other actions, such as opening the Main Menu, Quad mode, etc.

Minimum recording times on SD cards

The system supports SD cards up to 32 GB. Use the table below to help you estimate the recording times on various sizes of SD cards. Times shown are in hours and minutes.

SD Card Capacity	Single Channel Recording	4 Channel Recording
1 GB	2:00	1:19
2 GB	3:52	2:34
4 GB	8:04	5:21
8 GB	15:36	10:21
16 GB	30:48	20:27
32 GB	62:56	41:47

NOTE: The system is compatible with SD High Capacity (SDHC) cards, minimum Class 2. Using higher class SD memory does not ensure better performance.

Recording mode summary

Mode	Description	How to Operate
MANUAL RECORDING	• Continuous recording from one camera or entire screen in Quad mode	• Press the Record button ( ) to start/stop manual recording
SCHEDULE RECORDING	• Continuous recording from one camera, from Auto Sequence Viewing mode (system records cameras in sequence), or Quad or Screen Saver mode (system records all cameras in Quad mode) according to a weekly schedule	• **ATTENTION:** Turn off Motion Recording to enable Schedule Recording • Enter a Start and Stop Time for each day from **→Recording→ Schedule Record**
MOTION RECORDING (AUTO)	• System only records when motion is detected by a camera • Compatible with Quad mode (recommended) • Compatible with Auto Sequence Viewing mode	• Press to start/stop Motion Recording
SCREEN SAVER + MOTION RECORDING	• Enable Screen Saver to enable digital picture frame mode or turn off the LCD monitor when motion is not detected • You must upload images to the SD card to use digital picture frame mode (see “Screen Saver (digital picture frame) mode” on page 28). A PC is required to upload images to the SD card; Mac is not supported for this function	• Press to start Motion Recording • Press to enable Screen Saver mode • Cannot enable Screen Saver mode while the monitor is in Quad mode

Manual recording

Manual recording allows you to manually start/stop recording from one channel at a time or the entire screen in Quad mode. You can also record while in Digital Zoom mode. For details on using Digital Zoom, see “Digital Zoom” on page 12.

NOTE: During manual recording, you cannot change channels and Auto Sequence mode will stop automatically changing the channel.

To enable manual recording:

1 Press to start manual recording. "REC" appears on screen to indicate the system is recording. The system will record from the camera that is on screen or it will record the entire screen in Quad mode (black boxes will be shown for unused channels).

2 Press again to stop recording. "NEW" will appear on the LCD receiver indicating a new file is on the SD card.

When should I use manual recording?

- Recording of unexpected events or emergencies.

Schedule recording

Use schedule recording to have the system automatically record continuously from one camera, from Auto Sequence Viewing mode (system records cameras in sequence), or from the entire screen in Quad or Screen Saver mode (system records all cameras in Quad mode) according to a selected start and stop time.

NOTE: You must set a recording schedule for each day you would like to use schedule recording.

NOTE: Auto Sequence is available during schedule recording. However, the system will record video of the sequence itself. Therefore you cannot playback video of individual cameras.

Prerequisite:

Please ensure you have set the date and time on the receiver prior to setting a recording schedule. See “Setting the time” on page 14.

Step 1 of 2: Set a recording schedule:

1 Press then select **Recording** and press **OK**.

2 Select **Schedule Record** and press **OK**.

3 Select a day of the week and press **OK**.

4 Press **UP/DOWN** to configure the **Start Time** and **End Time** for recording on the selected day. Press **RIGHT/LEFT** to move the cursor (yellow) between hours and minutes for the Start Time and End Time.

NOTE: The time uses a 24-hour clock.

5 Move the cursor **RIGHT/LEFT** to select **ON** to enable the schedule or **OFF** to disable the schedule and press **OK** to save.

6 Repeat steps 3 through 5 for any additional days you would like to configure. When you are finished, press until all menus are closed.

Step 2 of 2: Enable schedule recording

1 Disable ALL RECORDING on the system:

- If the system is in manual recording, press the Record button ( ) to stop recording.
- If the system is in motion recording, press the Motion button ( ) until "MOTION" does NOT appear on the wireless receiver.

> **ATTENTION**
> Manual Recording or Motion Recording will override Schedule Recording.
>
> If you wish to use Schedule Recording, you must ensure Manual Recording and Motion Recording are disabled.

2 Select the desired viewing mode:
- Select a channel (1~4) by pressing **UP/DOWN**.
- Press to select between Auto Sequence Viewing mode and Quad mode.
- Press to enable Screen Saver mode (not available from Quad mode).

3 When the Start Time arrives, recording begins. The "REC" indicator appears on-screen.

Stopping Schedule Recording

When the Stop Time arrives, the system stops recording. If necessary, you can stop schedule recording manually.

To stop Schedule Recording:

1 Press the Record button ( ) to stop schedule recording.

NOTE: If you stop schedule recording, you cannot resume schedule recording. You will need to enter new Start and Stop times in the Schedule Record menu.

When should I use schedule recording?

- If the camera is pointed at an area with high traffic, such as a entry/exit or a road.

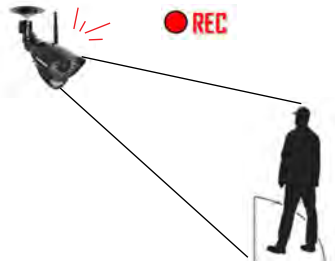
Motion recording

Use motion recording to have the system record only when motion is detected by one of the cameras. The system can be set to record only from the camera that detects motion or from the entire screen when the system is in Quad mode.

The system records motion in two ways. The cameras have built-in PIR sensor that track heat from body movements to detect movement up to a maximum range of 21 feet (6.5 meters). PIR motion detection is extremely accurate at detecting movements from people and animals, but the accuracy decreases in extremely hot environments approaching or exceeding human body temperature (98.6°F / 37°C).

The system also uses video motion detection, which looks for changes in video images (frames) to detect motion. Video motion detection allows for motion detection beyond the range of the PIR sensors and in extremely hot temperatures. Video motion detection is highly accurate, but may trigger recording from changes in light or moving trees, leaves, etc. You can set the sensitivity of video motion detection depending on your preferences (see "Configuring video motion detection" on page 21).

PIR Motion Detection



A camera detects body heat movements, and triggers the system to record.

Video Motion Detection

The system detects movement in the image and triggers recording.

Both PIR and video motion detection can be used at the same time for enhanced accuracy.

Setting up motion recording

Prerequisite:

- Insert an empty SD card into the LCD receiver.

To enable motion recording:

1. During live view, press .
   - "MOTION" will light up on the LCD receiver.
2. Select the viewing mode. The viewing mode determines how motion recording operates.
   - **Enable Quad mode (recommended):** Press until Quad mode is selected. By default, when motion is detected, the system will display and record the triggered camera on-screen. When motion recording is complete, the view will return to Quad mode. You can also configure the system to record the entire screen during Quad mode (see "Selecting Single Channel or 4 Channel motion recording" on page 21).

- **Enable Auto Sequence Viewing mode:** Press until a single channel is shown. When motion is detected, the system will display and record the triggered camera on-screen. When motion recording is over, Auto Sequence Viewing mode will continue as normal.
- **Change channels manually:** Press **UP/DOWN** to select a camera. **The system will ONLY record the selected camera; it will not record motion detected by other cameras.**
- **Enable Screen Saver mode:** Press to enable screen saver mode. When motion is detected, the system will display and record the triggered camera on-screen. When motion recording is over, Screen Saver mode will continue as normal. For details on configuring Screen Saver mode, see "Screen Saver (digital picture frame) mode" on page 28.

NOTE: By default, the system is set to record for 5 seconds after the triggered motion event. For details on adjusting the motion recording time, see "Configuring motion recording duration" on page 20 below.

3 Press again to stop motion recording. "MOTION" will turn off on the receiver.

Recording tip:

If you are using more than one camera, it is highly recommended to use Quad mode with Motion Recording. Quad mode allows you to see all four cameras at once. You can set the system to record the entire screen, so that video from up to 4 cameras is recorded (to configure 4 channel recording, see "Selecting Single Channel or 4 Channel motion recording" on page 21).

Configuring motion recording duration

Use the Duration menu to set the length of the time the system will record after motion is detected by a camera.

To change the motion recording time:

1 Press , then select **Recording** and press **OK**.

2 Select **Motion Record** and press **OK**.

3 Select **Duration** and press **OK**.

4 Select **5 seconds, 15 Seconds**, or **30 Seconds** and press **OK**.

5 Press until all menus are closed.

Selecting Single Channel or 4 Channel motion recording

Use the Mode menu to select between single channel and 4 Channel motion recording.

When single channel recording is activated, the monitor will switch to the camera that detects motion and record from that channel only.

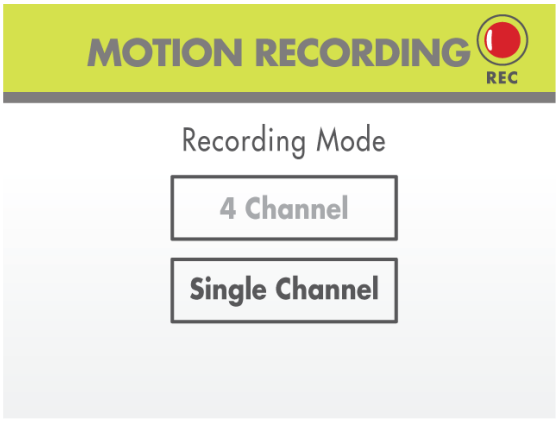
4 Channel recording will record the entire screen during Quad mode (4-way-split). Videos files recorded during 4 Channel recording will start with the letter Q.

4 Channel recording

To select 4 Channel or single channel recording:

1. Press , then select **Recording** and press **OK**.
2. Select **Motion Record** and press **OK**.
3. Select **Mode** and press **OK**.
4. Select **4 Channel** recording or **Single Channel** recording and press **OK**.
5. Press until all menus are closed.

Quad mode must be selected to use 4 Channel recording. To select Quad mode, press repeatedly.

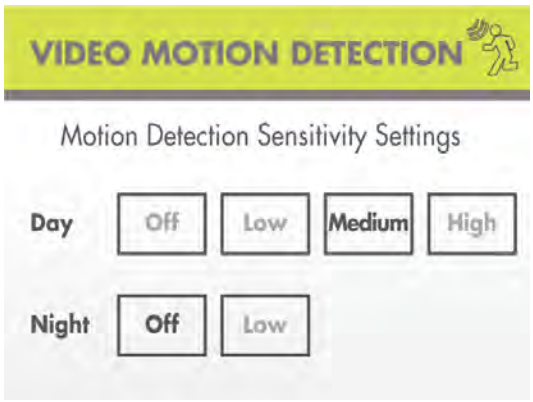


Configuring video motion detection

Video motion detection looks for changes in video images (frames) to detect motion. Video motion detection allows for motion detection beyond the range of the PIR sensors.

The drawback to video motion detection is that it can be falsely triggered by changes in lighting conditions or trees moving in the wind. You can disable video motion detection or configure the sensitivity using the menus.

For a description of the two motion detection technologies used by the system, see “Motion recording” on page 19.



To configure video motion detection:

1 Press , then select **Video Motion Detection** and press **OK**.

2 Select the camera you would like to configure and press **OK**.

3 Under **Day**, select **Off** to disable video motion detection, or select **Low**, **Medium**, or **High** sensitivity. Press **DOWN** to confirm.

4 Under **Night**, select **Off** to disable video motion detection or select **Low** sensitivity.

5 Press **OK** to save your changes.

6 Press until all menus are closed.

Configuring the recording quality

The recording quality determines the quality of video recorded.

1 Press , then select **Recording** and press **OK**.

2 Select **Quality** and press **OK**.

3 Select **HIGH** (640x480 VGA resolution) or **LOW** (360x240 QVGA resolution) quality and press **OK** to save your settings.

4 Press until all menus are closed.

Enabling/disabling overwrite

Use the overwrite feature to have the system overwrite the oldest recorded data on the SD card once the SD card is full.

To enable overwrite:

1 Press , then select **Recording** and press **OK**.

2 Select **Overwrite** and press **OK**.

3 Select **Yes** and press **OK**.

4 Press until all menus are closed. A icon is shown when overwrite is enabled.
If you do not enable Overwrite, the SD Card icon on the OSD will be red and a blue LED will light up under "FULL" on the wireless receiver when the SD card is full. You will need to manually delete files from the SD card or insert a new SD card into the wireless receiver. For details see “Deleting video or image files” on page 25.

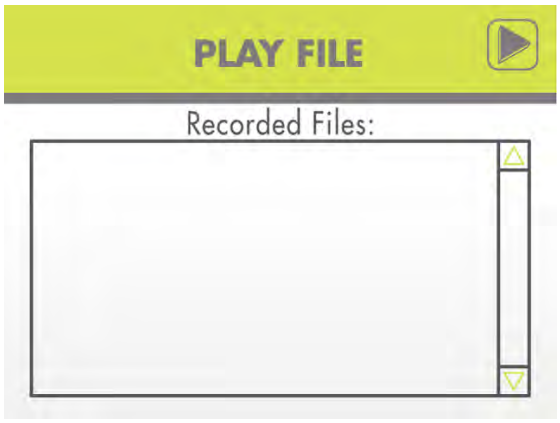
Playback

Playback mode allows you to playback the recorded video files or view images that you have uploaded to the SD card (for details, see "Uploading images to the SD card (PC only)" on page 28). You can view videos or images directly on the system or by connecting the SD card to your computer.

ATTENTION
All recording must be stopped on the system prior to playing back saved files. **The system cannot record during Playback.**

Video playback

To playback recorded video on the system:



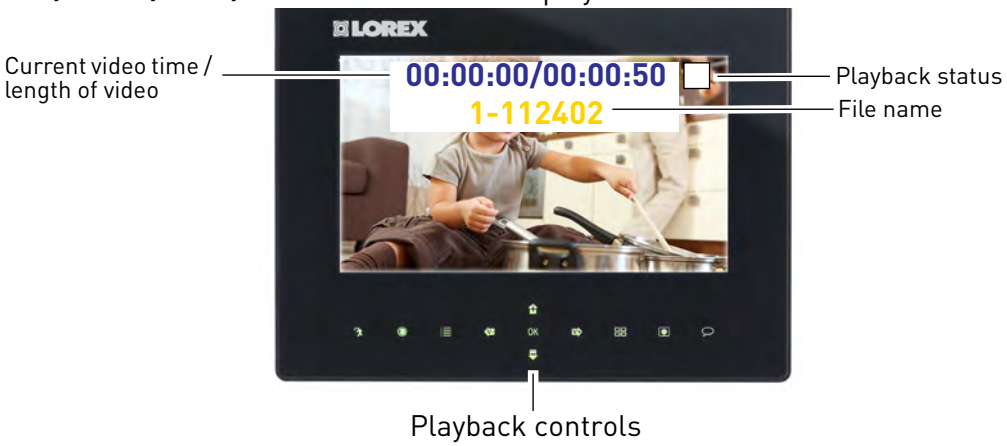
1. Stop all recording on the system.
2. During live viewing, press **OK**. The File menu opens.
3. Select the **VIDEO** folder and press **OK**.
4. Select a folder and press **OK**. Folders are labeled by date in yyyymmdd format (for example, 20121003 would be October 3, 2012). Select **[. .]** and press **OK** to go up a level.
5. Select a file from the list and press **OK**. The selected file loads and playback begins.

Tip:

Press **LEFT** and **RIGHT** to change pages to find video files quickly.

Controlling playback

Use **UP/DOWN/LEFT/RIGHT** to control video playback.



To control playback:

- **LEFT:** Rewind video / increase rewind speed. When you reach the beginning of the video, playback is stopped, and you can press **LEFT** to skip to the previous video in the list.
- **UP:** Pause / Play video.
- **RIGHT:** Fast forward / increase fast forward speed. When you reach the end of the video, playback is stopped, and you can press **RIGHT** to skip to the next video in the list.
- **DOWN:** Stop video. You can then press **RIGHT/LEFT** to select a different video file.

To exit playback:

- Press to return to the file list. Press repeatedly to return to live view.

Picture-in-Picture mode

While viewing recorded video, you can use Picture-in-Picture (PIP) mode to view your cameras side-by-side in a smaller window.

NOTE: Recording is not available in PIP mode.

To open Picture-in-Picture mode:

- While playing a video, press to open PIP mode. Your camera appears in the top left corner.

NOTE: PIP mode disables playback controls.

- Press **UP/DOWN** to change the camera shown in Picture-in-Picture mode.
- Press again to close Picture-in-Picture mode.

Image playback

If you have uploaded images to the SD card using PhotoRun, you can open them in Playback mode. For instructions on how to upload files to the SD card, see “Uploading images to the SD card (PC only)” on page 28.

NOTE: Recording and PIP mode is not available during image playback.

To open images in Playback mode:

1. Press **OK**.
2. Press **DOWN** to select the **Photo** folder and press **OK**.
3. Select the desired image folder and press **OK**.
4. Select an image file and press **OK** to open it.
   - Press **LEFT/RIGHT** to scroll through saved images.
   - Press to return to the file list. Press repeatedly to return to live view.

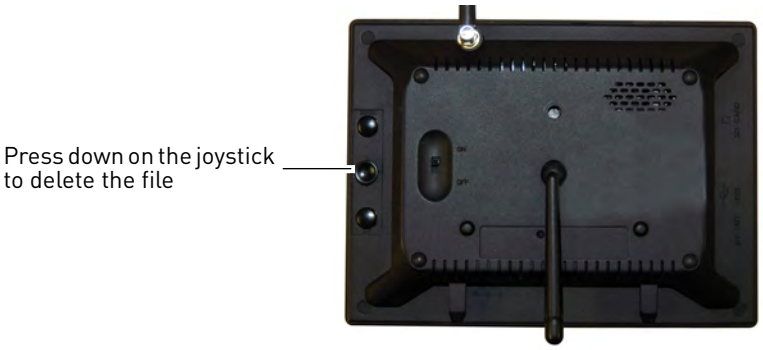
NOTE: If you do not press any buttons, the system will return to live view after 20 seconds.

Deleting video or image files

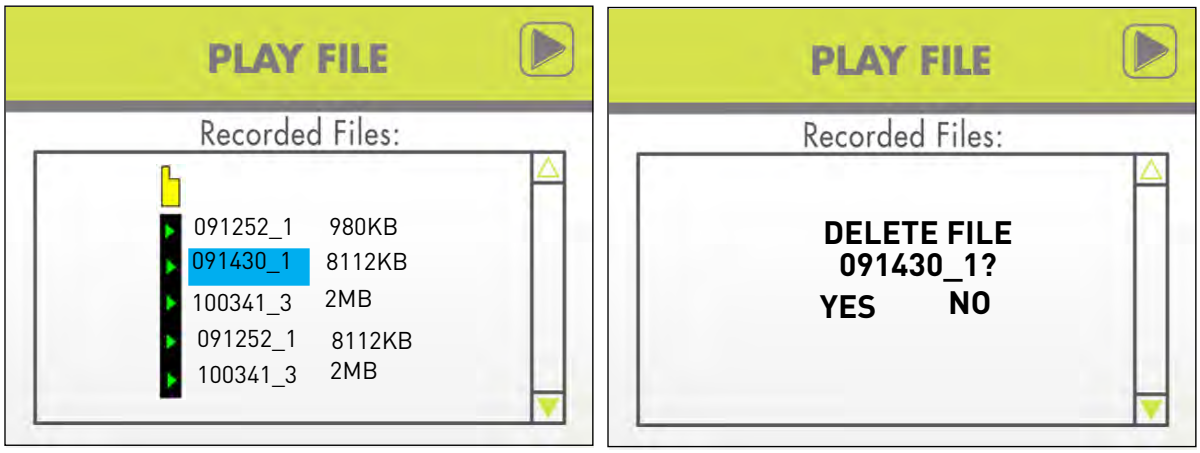
You can delete files on the SD card directly on the system. Delete files if you need to clear space on the SD card (if Overwrite is disabled), or for your own file management purposes.

To delete files on the SD card:

1. From live viewing, press **OK**. The File menu opens.
2. Browse to the file you would like to delete. Press down on the joystick on the rear panel of the system.



3 A delete confirmation message appears, highlight **YES** and then press **OK** to delete the file.



4 Repeat the steps above for other files on the SD card.

NOTE: You cannot delete folders on the SD card using the system.

ATTENTION
Do NOT delete folders on the SD card using your computer. Deleting folders may affect your access to other files on the card or may affect normal operation of the SD card with the system. If you want to delete the entire contents of the SD card, it is highly recommended to format the card using the system. For details, see "Format Memory" on page 35.

Viewing video directly from the SD card

You can view the saved video files on your computer (PC or Mac) by using an SD card reader (not included). Saved video files are in AVI format.

NOTE: Some PCs and Macs may have an SD card reader built-in. Please refer to your computer's instruction manual for more details.

PC

ATTENTION
The XviD, DivX, or FFDShow codec is required if attempting to view the video files in Windows Media Player™. You can also view AVI files natively in other media players such as VLC and DivX Player.

To playback recorded video on a PC:

1 Remove the SD card from the wireless receiver by gently pushing on the SD card. The SD card will pop out from the slot.

2 Insert the SD card into an SD card reader (not included) connected to your PC. Your PC should load the SD card as a new Removable Drive and an Autorun window opens.

3 Click **Open folder to view files** or open the folder in Computer. You should see a folder labeled "VIDEO."

4 Open the **VIDEO** folder and then open one of the Date folders (yyyymmdd). The AVI file list appears.

5 Double-click any of the AVI files. The video will begin playing in your default AVI media player.

MAC

ATTENTION
Additional codecs are required if attempting to view AVI files in QuickTime. VLC Player is recommended for viewing AVI files on a Mac. VLC is an open-source freeware application available at www.videolan.org

To playback recorded video on a Mac:

1 Remove the SD card from the wireless receiver by gently pushing on the SD card. The SD card will pop out from the slot.

2 Insert the SD card into an SD card reader (not included) connected to your Mac. Your Mac should load the SD card as a new disk on your desktop.

3 Double-click the disk on your desktop or open it through Finder. You should see a folder labeled "VIDEO."

4 Double-click the **VIDEO** folder and then open one of the Date folders (yyyymmdd). The AVI file list appears.

5 Double-click any of the AVI files. The video will begin playing in your default AVI media player.

Screen Saver (digital picture frame) mode

Use the Screen Saver mode to conceal the fact that the wireless receiver is actually a surveillance recorder.

Screen Saver mode has two options: blank screen or digital picture frame mode.

- In blank screen mode, the monitor will turn off when motion is not detected.
- In digital picture frame mode, you can upload personal images to the SD card and the monitor will display them when motion is not detected.

In both modes, when motion is detected, the system will display the triggered camera in single channel full-screen.

NOTE: You must connect the wireless receiver to a PC to use digital picture frame mode. You cannot upload personal photos to the wireless receiver using a Mac computer.

Uploading images to the SD card (PC only)

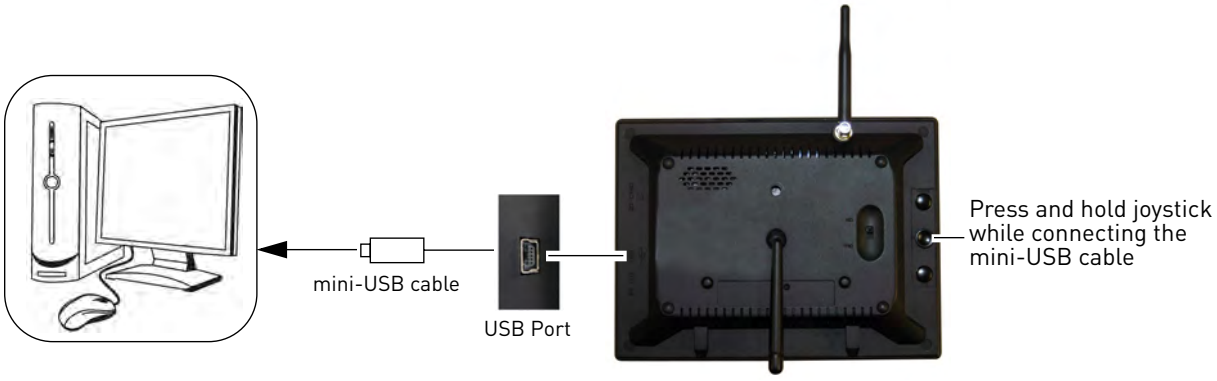
You can connect the wireless receiver to a PC to upload personal images to the SD card for digital picture frame mode. The built-in PhotoRun application automatically converts and resizes your images to be compatible with the wireless receiver.

NOTE: The following image file formats are compatible with the wireless receiver: BMP, JPG, TIF, and GIF.

NOTE: Photorun is compatible with the following versions of Windows: XP, Vista, 7.

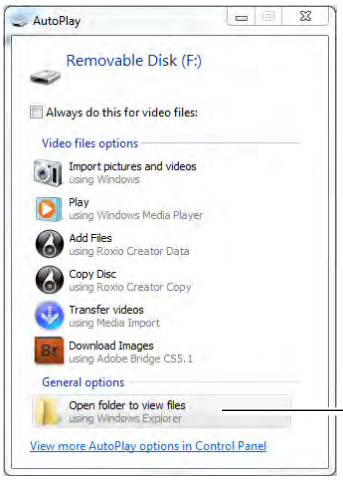
To upload images to the SD card:

1 Press and hold the joystick on the rear panel of the wireless receiver. Keep the joystick held down and connect the mini-USB cable between the monitor and your PC. **Do not release the joystick until "USB PC MASS STORAGE MODE" appears on the monitor**.

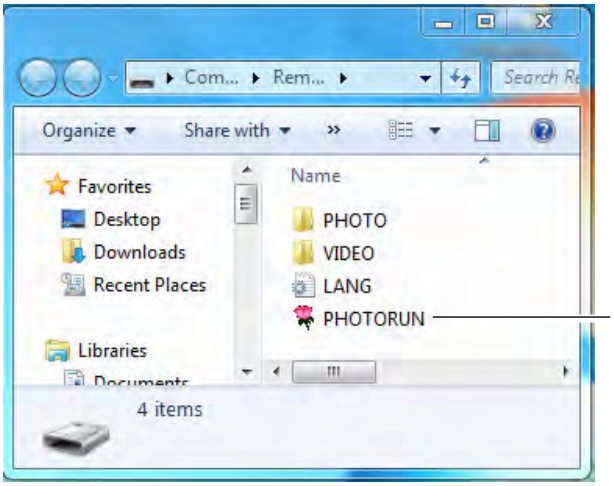


NOTE: If "USB PC CAMERA MODE" appears on the monitor, remove the mini-USB cable and wait for the system to restart. This may occur if the joystick is released before the system can successfully enter USB Mass Storage mode.

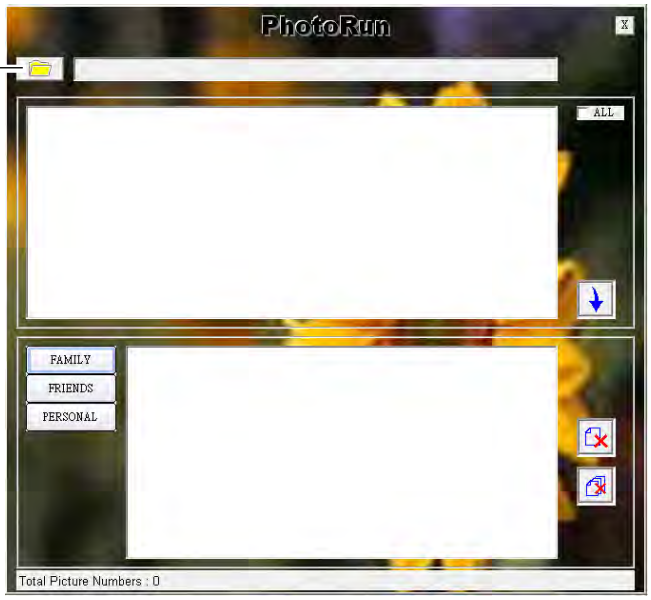
2 An Autorun window appears. Click **Open folder to view files**.



3 Double-click the **PHOTORUN** file. The PhotoRun application opens.

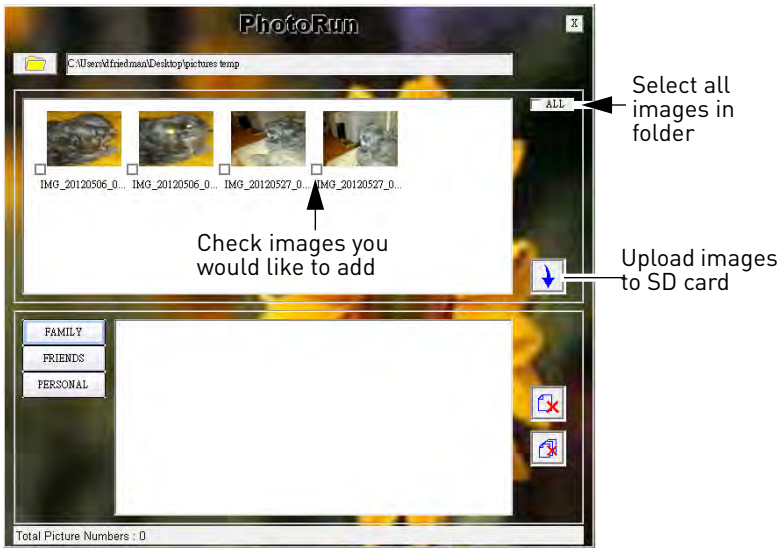


4 Click then select the folder where the images you would like to upload are stored and click **OK**.

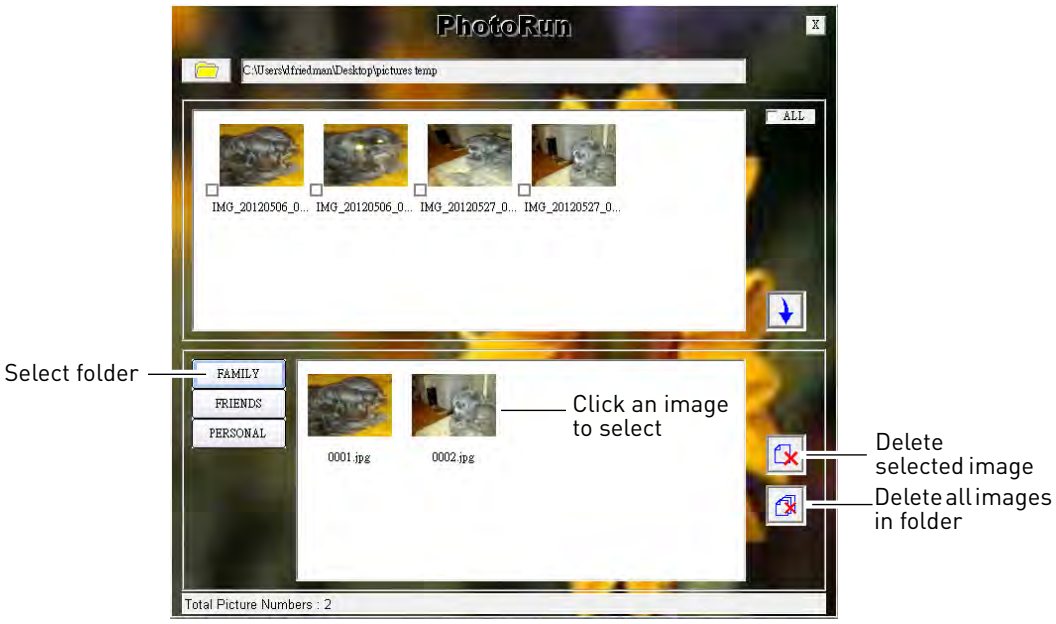


5 All images in the folder are added to the top area of the screen. Check **ALL** to select all the images in the folder or check any images you would like to add and click to upload them to the SD card.

NOTE: Images are uploaded into the Family folder by default. During Screen Saver mode, press **UP/DOWN** to select the folder. Each folder can store up to a maximum 256 images.



6 Saved images appear in the lower portion of the screen. If you want to delete images from the SD card, click to delete the selected image or click to delete all the images in the selected folder. You can switch between folders by clicking **Family**, **Friends**, or **Personal**.



7 When you are finished uploading or deleting images, click **X** to close the PhotoRun application and then disconnect the USB cable from the wireless receiver.

- To use your pictures with Screen Saver mode, see “Configuring Screen Saver mode” on page 31.
- To open images in Playback mode, see “Image playback” on page 25.

Configuring Screen Saver mode

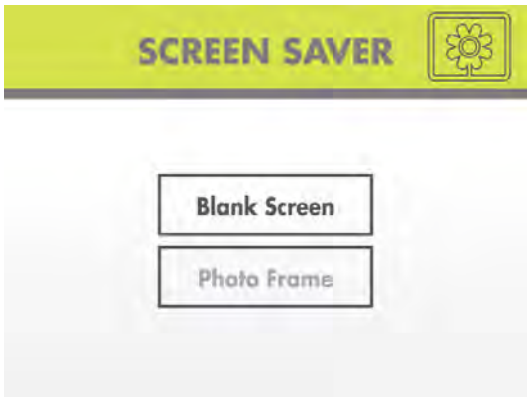
By default, Screen Saver mode is in Blank Screen mode. You can enable digital picture frame mode and configure transition options for digital picture frame mode (PC only).

Prerequisites:

- To use digital picture frame mode, you must upload images onto the SD card. see "Uploading images to the SD card (PC only)" on page 28.

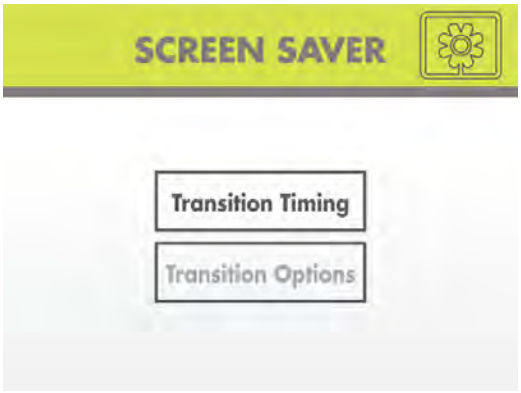
To configure Screen Saver mode:

1. Press on the wireless receiver.
2. Press **RIGHT/LEFT** to select **Screen Saver** and press **OK**.
3. Press **UP/DOWN** to select **Blank Screen** or **Photo Frame**.
   - If you press Blank Screen, when Screen Saver mode is activated, the screen will turn blank until motion is detected. Press to return to live viewing.
   - If you select Photo Frame, follow the steps below to configure transition options.



Select Blank Screen or Photo Frame for digital picture frame mode

4. Select **Transition Timing** and press **OK**. Select the time that images will be shown before switching and press **OK**.
5. Press **DOWN** to select **Transition Options** and press **OK**. Select the transition effect that will be used when switching images and press **OK**. Available options are:
   - **Sequence:** New image replaces the old image in a scanning pattern.
   - **Push:** New image pushes the old image out of the frame.
   - **Split:** New image splits the old image to replace it.



Configure Transition options for digital picture frame mode

6. Press until all menus are exited.

NOTE: The system will be in Auto Sequence mode when Screen Saver mode is disabled.

Activating Screen Saver mode

- In live view, press to activate Screen Saver mode. The "SCAN" icon lights up and the monitor displays your images or a blank screen, depending on settings.

NOTE: You cannot activate Screen Saver mode when the system is in Quad mode. To exit Quad mode, press .

- While the monitor displays your images: press **UP/DOWN** to change image folders, press **LEFT/RIGHT** to scroll between pictures in the same folder, and press **OK** to start/stop the image slide show.
- Press again to exit Screen Saver mode.

Motion detection in Screen Saver mode

With the Screen Saver activated, motion detection is enabled on the system. When motion is detected by one of the cameras, the LCD receiver displays the triggered camera in single-channel full-screen, and the motion alarm beeps (if Alarm Volume is turned up), but the system does not record. When the motion trigger is finished, the system returns to Screen Saver mode.

NOTE: Unless the REC stamp appears on-screen, the system is NOT recording.

The Screen Saver displays the triggered camera when motion is detected.

Screen Saver with motion recording

You can also enable Motion Recording to function with the Screen Saver.

To enable Screen Saver with motion recording:

1. From live viewing, press to activate motion recording. The "MOTION" icon lights up.
2. In live view, press to activate Screen Saver mode. The "SCAN" icon lights up.
   - When motion is detected by one of the cameras, the system displays the triggered camera on-screen, the alarm beeps, and the system begins recording. When motion recording is finished, the system returns to Screen Saver mode.

Pairing/adding cameras

IMPORTANT	**If you have purchased additional cameras, it is highly recommended to pair the cameras to the receiver before permanent installation.**

"Pairing" is an electronic handshake between wireless devices. Wireless devices and components need to be paired in order to communicate with each other.

The camera(s) provided with the system have already been paired to the LCD receiver. By default, the camera(s) included are automatically paired to channels 1 & 2 on the wireless receiver. See channel label on the camera to check which channel it has been set to.

If you have purchased additional accessory cameras, you will need to pair them to the receiver. When pairing cameras, you can select the channel you would like the cameras to be assigned to. You can also use the steps below to reassign your existing cameras to different channels.

NOTE: Accessory cameras (model# LW2731AC1) are available from www.lorextechnology.com.

To pair an additional camera:

1 Connect the new camera to a power outlet when you are ready to begin the pairing process. Place the camera and LCD receiver within 1ft of each other.

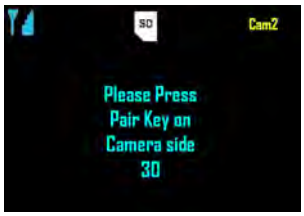
2 Press on the wireless receiver.

3 From the Main Menu, press left and right to select **Pairing** and press the **OK** button.

4 Select a channel and press the **OK** button.

NOTE: If you pair a new camera to a channel that is already being used by an existing camera, the new camera will be connected to that channel. The old camera will automatically be disconnected.

5 Following the on-screen prompt, press the **Pair** button behind the camera for 1 second. You have 30 seconds to press the Pair button on the camera. Once paired, the camera will be immediately displayed on-screen.

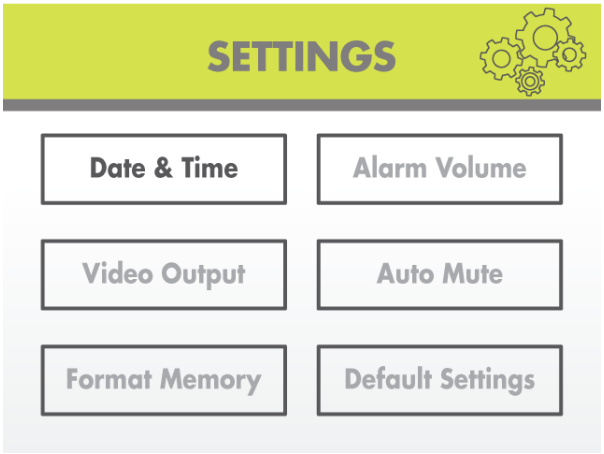


NOTE: If you do not press the Pair button on the camera during the 30 second pairing window, repeat steps 2~5 to try the pairing process again.

NOTE: If the speaker begins squealing, move the camera and receiver away from each other.

Settings

Use the Settings menu to set the system time, change display options, and format the SD card.



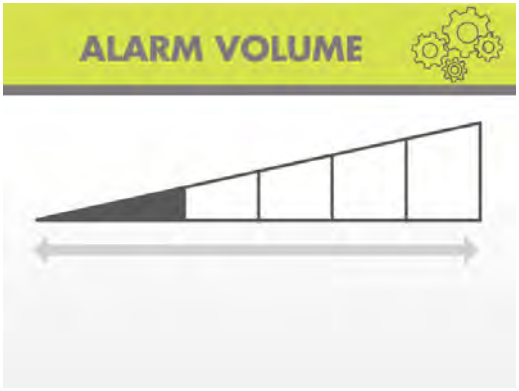
The Settings menu contains the following sub-menus:

- **Date & Time:** Set the date and time on the system. For details, see "Setting the time" on page 14.
- **Alarm Volume:** Increase/decrease the alarm or button volume.
- **Video Output:** Select the TV system (NTSC/PAL) for audio/video output.
- **Auto Mute:** Automatically mute audio from the cameras when the level of sound detected is low.
- **Format Memory:** Format the SD card.
- **Default Settings:** Restore the system to factory settings.

Alarm Volume

Use the Alarm Volume menu to increase / decrease the volume of the buzzer when motion is detected by the camera(s). The Alarm Volume also controls the volume of the 'beep' when you press buttons on the wireless receiver. If you want to turn off the buzzer or button sounds, turn the Alarm Volume to the minimum setting.

- If using AV out, changing the system alarm volume will also affect the level of audio output.



To increase/decrease alarm volume:

1. Press , then press **RIGHT/LEFT** to select **Settings** and press **OK**.
2. Select **Alarm Volume** and press **OK**.
3. Press **RIGHT** to increase the alarm volume, and press **LEFT** to decrease the alarm volume. Set the volume all the way to the left to disable the alarm buzzer and button sounds.
4. Press **OK** to save your settings.
5. Press until all menus are closed.

Video Output

Use the AV out menu to select the TV system for the wireless receiver.

To select the TV system:

1 Press , then press **RIGHT/LEFT** to select **Settings** and press **OK**.

2 From the Settings menu, select **Video Output** and press **OK**.

3 Select **NTSC** (North America) or **PAL** (UK/Europe) and press **OK** to save.

4 Press until all menus are closed.

Auto Mute

The Auto Mute feature will automatically mute audio from the cameras when the level of sound detected is low. This is useful if you wish to avoid playing white noise on the receiver, but still want to hear audio if something happens.

To enable Auto Mute:

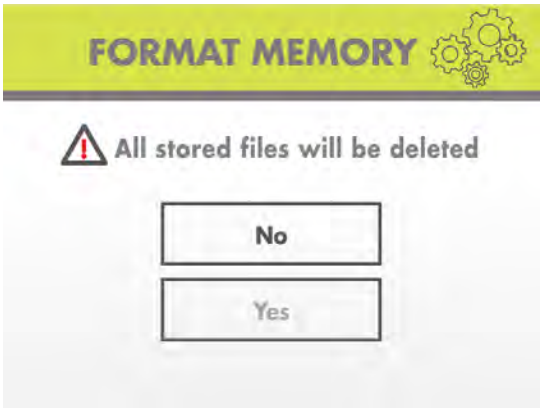
1 Press , then press **RIGHT/LEFT** to select **Settings** and press **OK**.

2 Select **Auto Mute** and press **OK**.

3 Select **ON** and then press **OK** to save changes.

4 Press until all menus are closed.

Format Memory



Use the Format Memory menu to format the SD card. It is highly recommended to format the SD card prior to initial recording.

To format the SD card:

ATTENTION
Formatting erases all data on the SD card. This step cannot be undone.

1 Insert the SD card into the SD card slot on the wireless receiver until you hear a "click." Please insert the card according to the diagram on the panel.

2 Press , then press **RIGHT/LEFT** to select **Settings** and press **OK**.

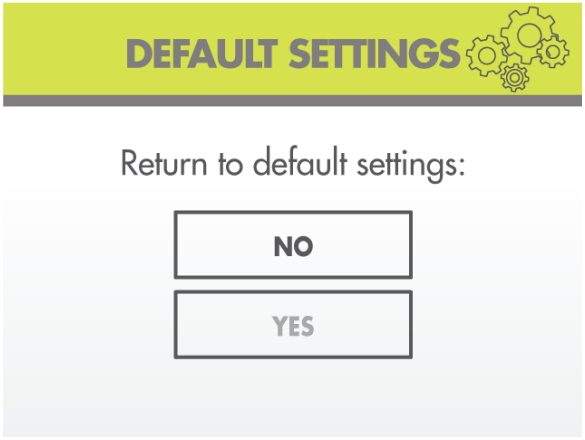
3 Select **Format Memory** and press **OK**.

4 Select **Yes** and press **OK**.

5 A message appears to confirm formatting. Select **Yes** and press **OK** again to confirm. Please allow a few moments for formatting to finish. Formatting time will vary depending on the size of the SD card.

Default Settings

Use the Default Settings menu to restore the system to factory settings.



NOTE: Restore factory settings DOES NOT delete video files on the SD card, nor does it reset the date and time on the system.

To restore default settings:

1. Press , then press **RIGHT/LEFT** to select **Settings** and press **OK**.
2. Select **Default Settings** and press **OK**.
3. Select **Yes** and press **OK**.
4. Press until all menus are closed.

Camera On/Off

Use the Camera On/Off menu to show/hide camera channels on the main display screen. For example, if you disable camera 3, it will not appear in any viewing mode.

To enable/disable cameras:

1. Press , then press **RIGHT/LEFT** to select **Camera ON/OFF** and press **OK**.
2. Press **UP/DOWN** to select the desired camera and press **RIGHT/LEFT** to select **Active** to show the camera or **Skip** to hide it.

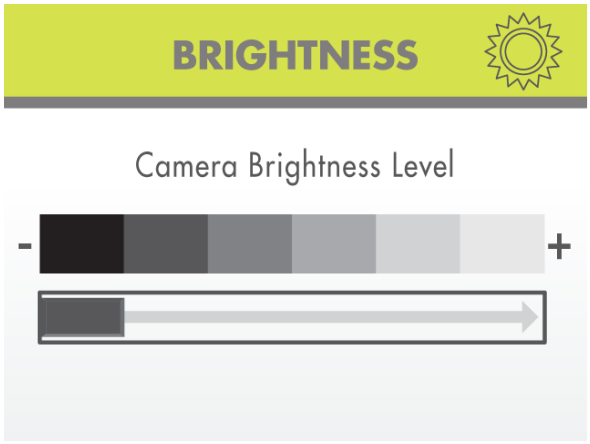
   NOTE: The currently selected camera will have Active/Skip highlighted in RED.
3. Press the **OK** button to save changes.
4. Press the button to exit.

   NOTE: Any disabled channels will be blacked out in Quad mode.

Brightness

Use the Brightness menu to adjust the brightness level of video coming from your cameras.

NOTE: You cannot adjust the brightness of the LCD display.



To adjust camera brightness:

1. While viewing, press **UP/DOWN** to select the camera you would like to adjust.

   NOTE: You can set a separate brightness level for each camera.
2. Press , then press **RIGHT/LEFT** to select **Brightness** and press **OK**.
3. Press **RIGHT** to increase the brightness level for the selected camera or **LEFT** to decrease. Press **OK** to confirm.
4. Press the button to exit.
5. Repeat steps 1~4 to configure your other cameras as needed.

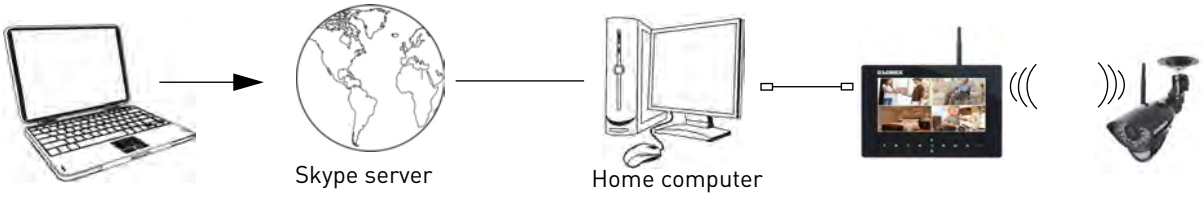
Viewing your camera remotely using Skype™

Connecting to your system through Skype is a convenient and free* method to view your camera from anywhere with an Internet connection.

NOTE: When remotely connecting to your video monitor using Skype, **audio monitoring, audio recording, and video recording are disabled**.

How it works

Your computer connects to the Skype server. The Skype server is connected to your home computer. Your home computer connects to the wireless receiver, which captures video from the camera.



System requirements

For the latest device compatibility list, visit www.lorextechnology.com/support.

iPhone®, iPad®, iPod Touch® Requirements

- Skype for iPhone / iPad.
- iOS 4.0 and above.

Android Requirements

- Skype for Android.
- Android™ v. 2.3 and above.

PC requirements

- Skype for Windows v. 4.2 and above.
- Windows 8 / 7 / Vista / XP SP2 and above.
- 1 Ghz or greater processor.

For instructions, see “Connecting to Skype on a PC” on page 39.

NOTE: Windows RT and Windows phone devices are not supported at this time.

Disclaimers

You must have a high-speed internet connection to use the video function on Skype. Traffic congestion may result in choppy video.

Mobile Data Charges

When using a mobile cellular network, data charges may apply. Check with your provider for details.

*Computer to computer

For Skype related support, visit https://support.skype.com/

Connecting to Skype on a PC

Step 1 of 6: Installing the camera driver for PC

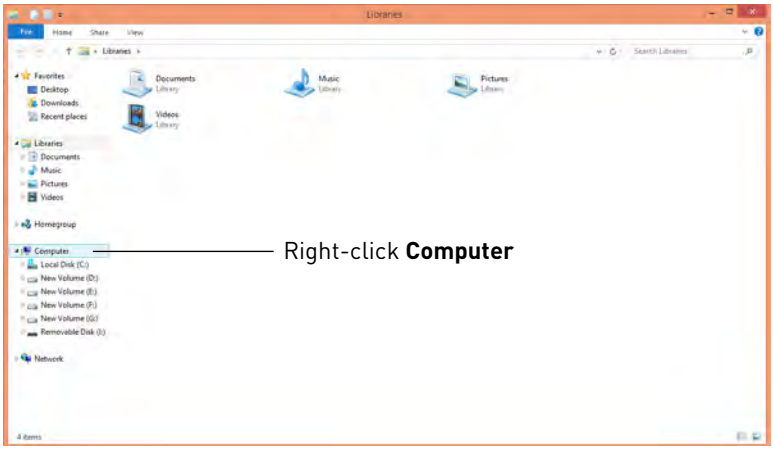
You will need to install the camera drivers located on the software CD (included) or available as a free download from www.lorextechnology.com.

NOTE: There are two drivers available for PC based on your computer system type: one for 32-bit operating systems, and one for 64-bit. You must determine which system type you have and install the corresponding camera driver.

To determine your system type:

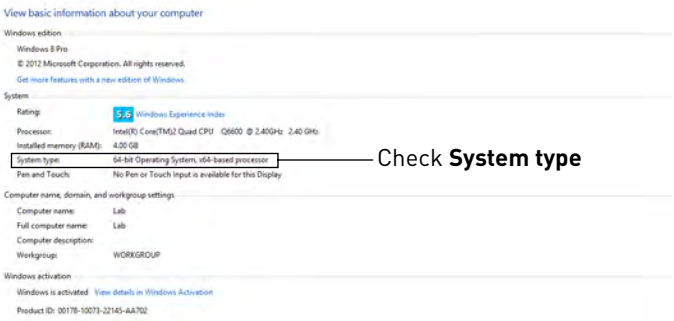
1 Press **+ E** on the keyboard to open Windows Explorer.

2 Right-click **Computer** on the left-side panel in Windows Explorer.



3 Click **Properties**.

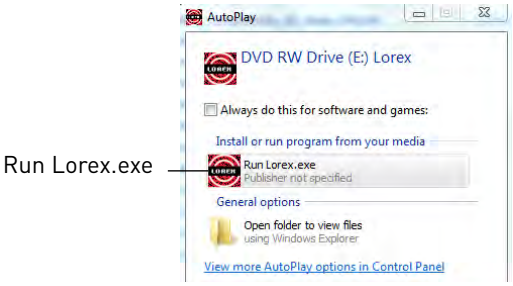
4 Under **System**, check the **System type**. The system type description will specify whether your system is 32-bit or 64-bit.



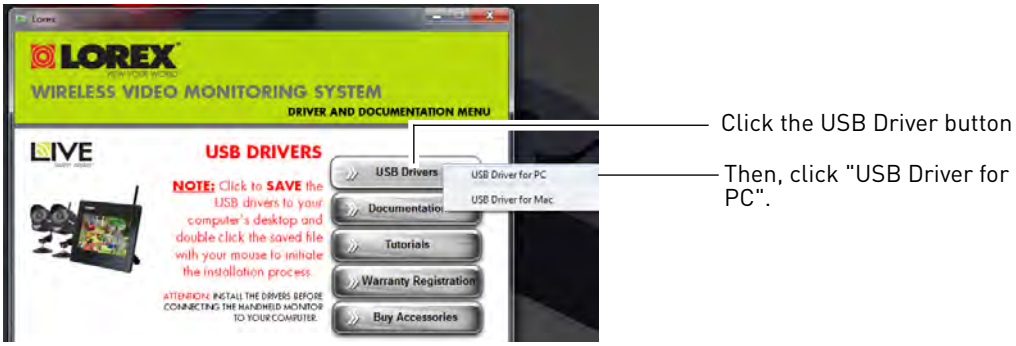
To install the camera drivers:

1 Insert the software CD into your computer. An Autoplay window opens.

2 Click **Run Lorex.exe**.



3 Click the **USB Driver** button, and then click **USB Driver for PC**.



4 Double-click the .zip file to extract the contents.

5 Open the extracted folder and double-click **dpinstX86** if you have a 32-bit system or **dpinstX64** for 64-bit.

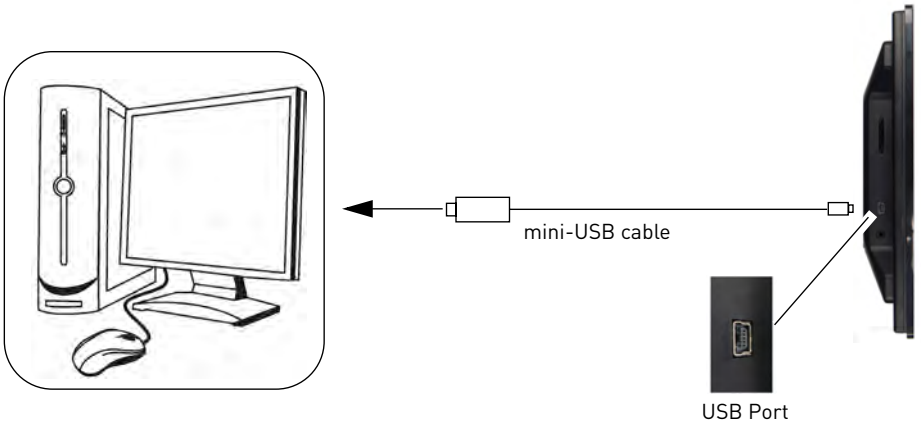
6 Follow the on-screen instructions to complete the driver installation.

Step 2 of 6: Connecting the video monitor to the PC

1 Turn on the camera first, then the video monitor. **Make sure you can see a video image on channel 1**.

NOTE: Pair the camera that is most important for you to view remotely to Channel 1. For instructions on how to pair cameras, see "Pairing/adding cameras" on page 33.

2 Connect the mini-USB cable (included) to your video monitor and into the computer's USB port. The video monitor displays the following: "USB PC CAMERA MODE"



Step 3 of 6: Creating a Skype / Microsoft account

A Skype account allows you to connect to your camera through the Skype service. You can also log in to Skype using a Microsoft e-mail address. Skype is a service that allows users to make voice calls and video calls to anywhere in the world.

NOTE: The Skype illustrations and instructions below serve as a guideline only. Skype may change their website / product interface without prior notice.

If you do not have a Skype account

See "If you do not have a Skype account..." on page 47.

If you are using the Windows Store Skype app

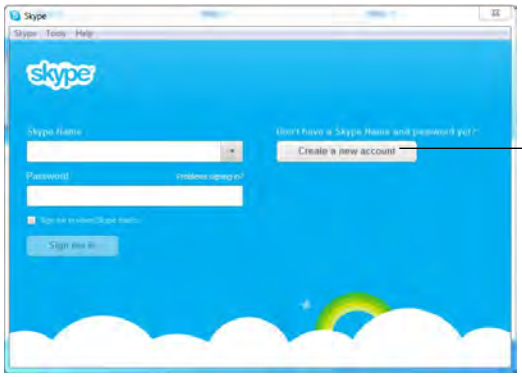
See "Remote access using the Windows Store Skype app" on page 49.

To create an account using Skype for desktop

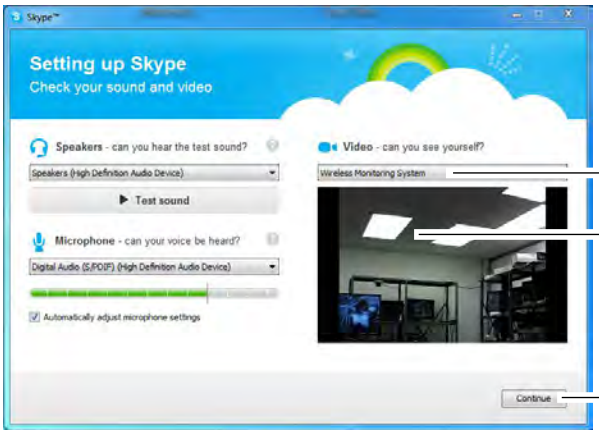
In order to connect to your video monitor using Skype, you will need **two accounts**—one for the camera (e.g., Lorex Camera) and one for yourself (e.g.,Tom Smith). Follow the instructions below.

1 Launch Skype. If you are connected to Skype, click **Skype→Sign Out**.

2 From the Skype Login window, click **Create a new account.**

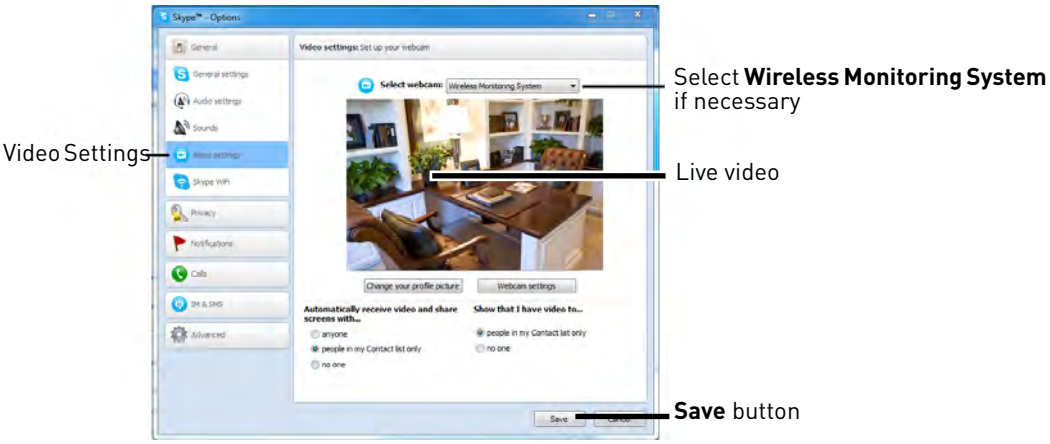


3 Follow the on-screen instructions to create a new account. Upon login, the Setting up Skype wizard starts. Click **Continue**. Under Video, you will see an image from the camera. If no image appears, make sure the monitor is connected to the computer via the USB cable.



NOTE: If you can see an image from a webcam that is already connected, select **Wireless Monitoring System** from the drop-down menu.

NOTE: If the Setting up Skype wizard does not run, click **Tools→Options→Video Settings**. Make sure you can see video in the window. Click **Save** to exit. If the image is from an already connected webcam, select **Wireless Monitoring System** under **Select Webcam**.



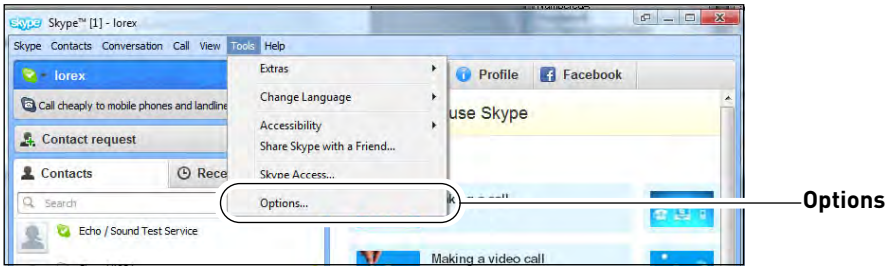
4 Click **Continue**.

5 In the next page, click **Add later** to not include a profile picture for the camera's Skype account, or click **Continue** and follow the instructions to add a profile picture for the camera's Skype account.

6 Click **Start using Skype**.

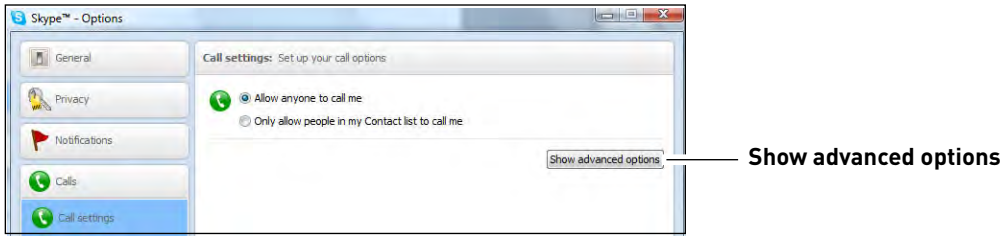
Step 4 of 6: Configuring Skype

1 Click on **Tools→Options**.

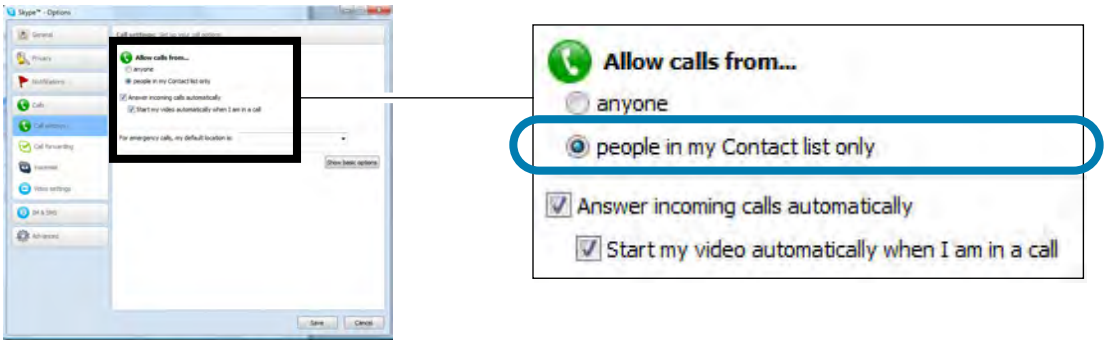


2 Click the **Calls** button ( ).

3 Click the **Show advanced options** button.

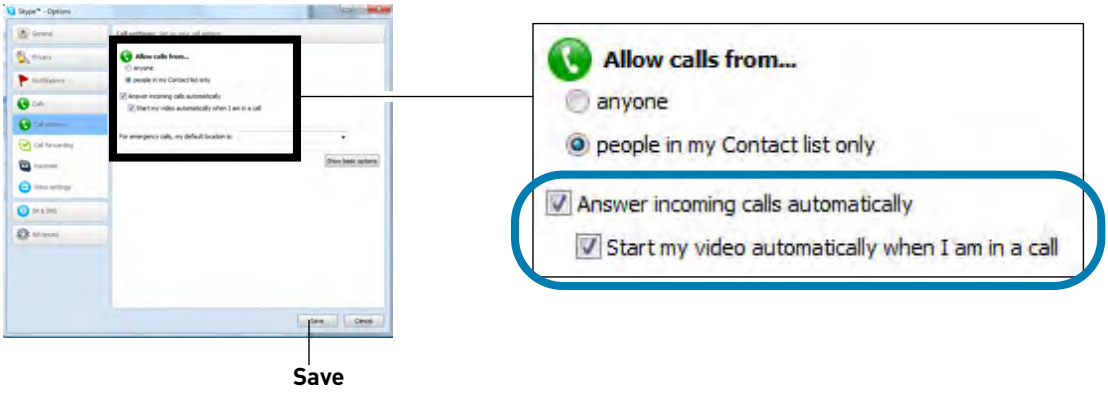


4 Under Allow calls from..., select **people in my Contact list only**. This will prevent the device from accepting Skype calls from anyone who is not in the contact list for its account.



NOTE: You may also select **anyone**, which will allow anyone with a Skype account to call the device and access your camera. This setting is not recommended

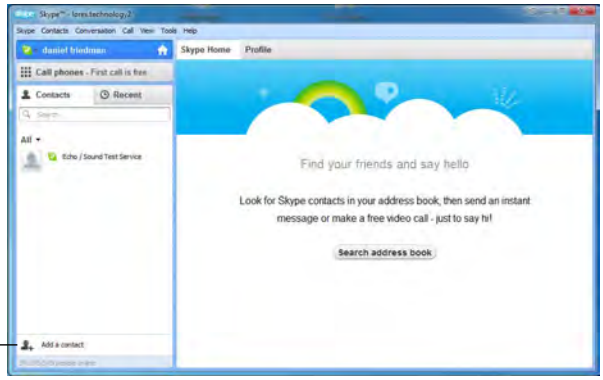
5 Check **Answer incoming calls automatically** and **Start my video automatically when I am in a call**. Click **Save**.



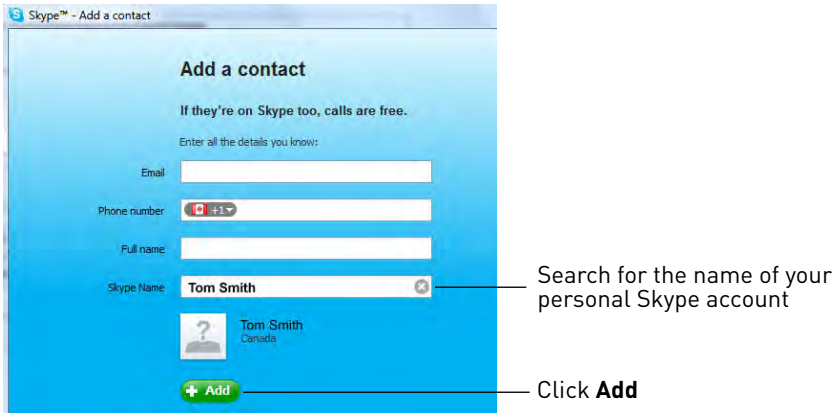
Step 5 of 6: Send a contact request

Next, you have to send a contact request to your personal account (e.g.,Tom Smith).

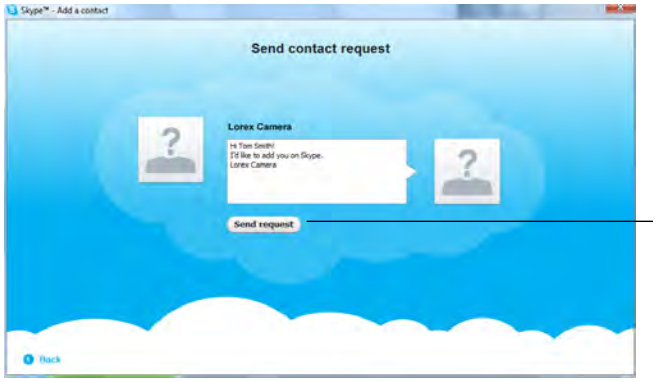
1 Click the **Add a contact** button (Add a contact).



2 Search for the name of your personal account (e.g.,Tom Smith), and then click the **Add** button.



3 Click **Send Request**.

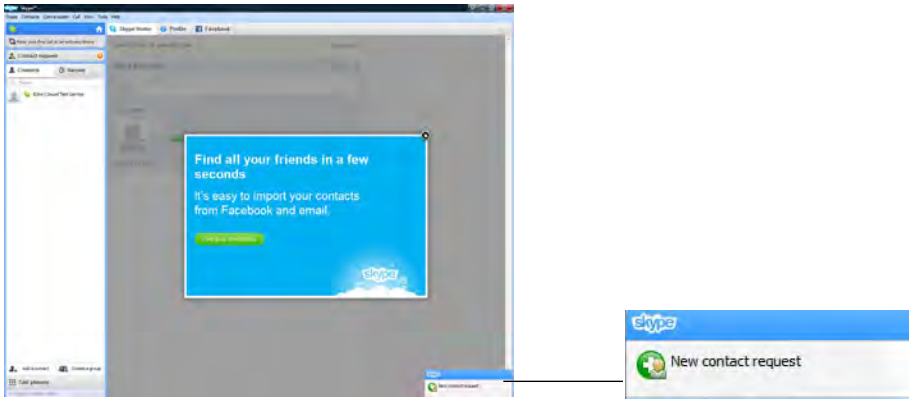


Step 6 of 6: Test the connection

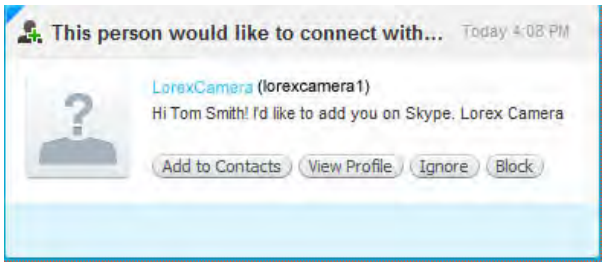
NOTE: This step requires you to log in to Skype from a **different computer** or **compatible mobile device**.

1 Log in to your personal account (e.g.,Tom Smith).

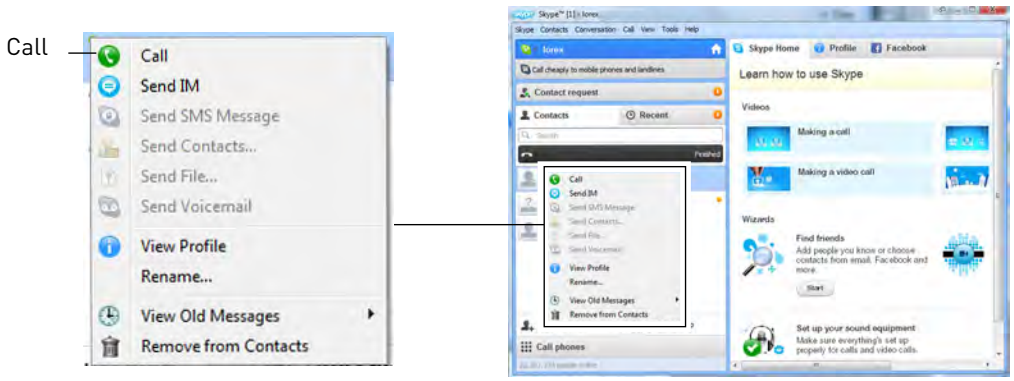
2 A "new contact" pop-up appears. Click the new contact request icon that appears on the bottom-right corner of the window.



3 Click the **Add to Contacts** button to add the camera to your contact list.



4 From the contact list, right-click on your camera's account name (e.g.,Lorex Camera), and click **Call**. The video call begins automatically. Please allow around 15 to 25 seconds for the video connection to be established.



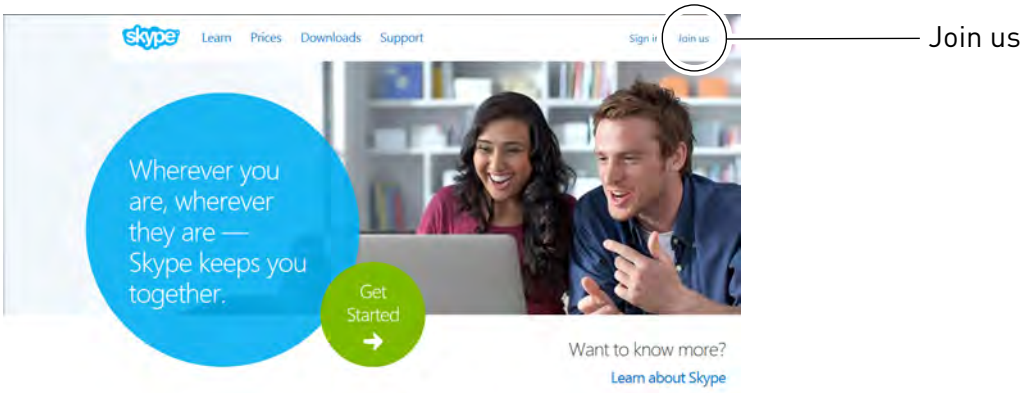
NOTE: Video may appear pixelated immediately after connecting. It should improve within a few seconds, depending on your Internet connection.

If you do not have a Skype account...

Create your personal account first (e.g., Tom Smith), then create a second account for your camera (e.g.,Lorex Camera).

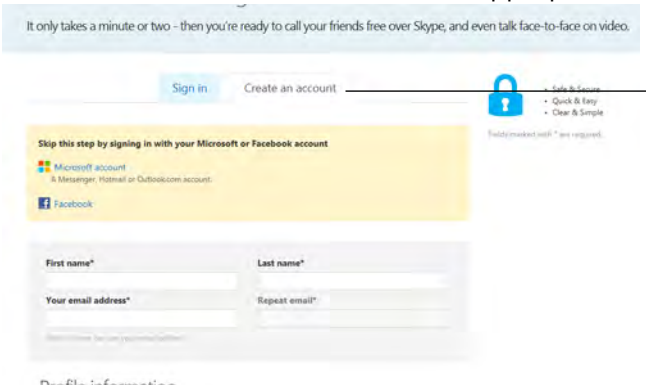
Create a personal account (i.e., Tom Smith):

1 Go to www.skype.com, and click on **Join us**.



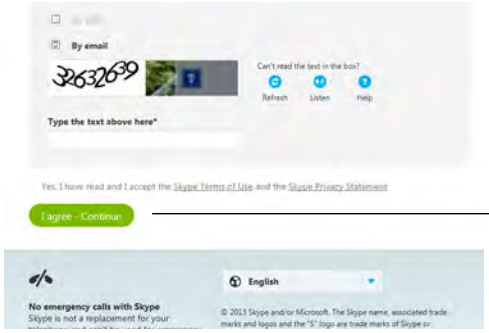
Join us

2 Click **Create an Account**. Fill in the appropriate fields.



Create an account

3 Click the **I Agree - Continue** button.



I Agree - Continue

4 Follow the on-screen instructions to download and install Skype on your computer.

5 Once you are logged in to Skype, click on **Skype→Sign out**, then see "Connecting to Skype on a PC" on page 39.

My Skype Account Information

"Personal" Skype account
(e.g., Tom Smith)

Skype Name:

Password:

Email address used to register this account (used for account retrieval)**:**

"Camera" Skype account
(e.g., Lorex Camera)

Skype Name:

Password:

Email address used to register this account (used for account retrieval)**:**

Remote access using the Windows Store Skype app

NOTE: Ensure you have completed Steps 1 and 2 of setting up remote viewing for PC before using the following procedure. For details, see "Viewing your camera remotely using Skype™" on page 38.

NOTE: Windows RT and Windows phone devices are not supported at this time.

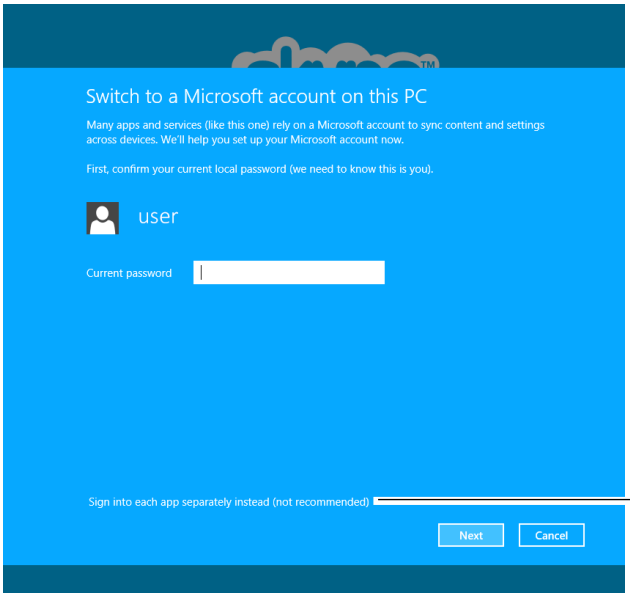
Step 1 of 4: Creating a Skype / Microsoft account for your camera

You must have two Microsoft accounts to access your camera: your personal Microsoft account (for running the Skype app) and one for the camera. When setting up remote access to your camera, you will use the Microsoft account created for your camera, not your personal account. This section assumes you already have a personal Microsoft account.

NOTE: The Skype illustrations and instructions below serve as a guideline only. Skype may change their product interface without prior notice.

1 Launch Skype. If you are connected to Skype, click the Profile icon ( ) then click **Sign Out**.

NOTE: You may see the following screen when you launch the Skype app depending on your version of Windows 8. If this screen appears, click **Sign into each app separately instead**.



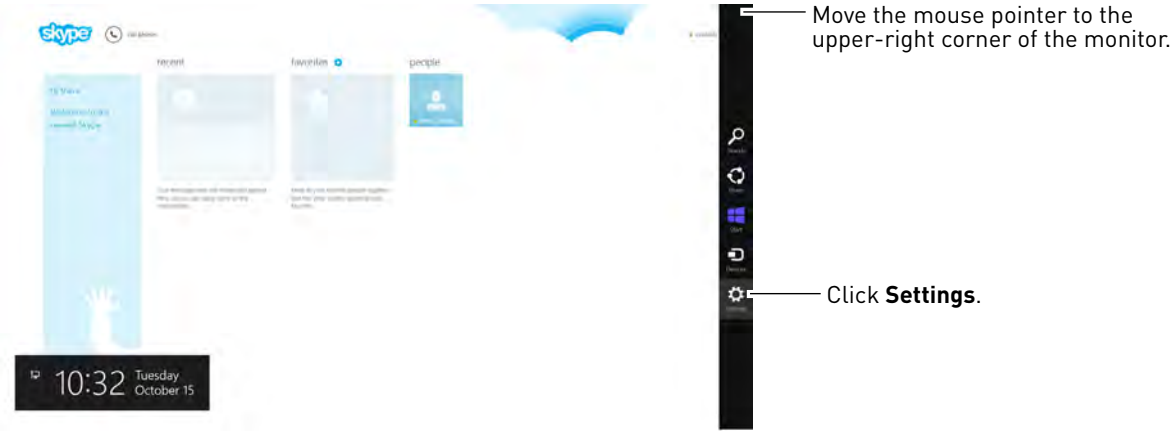
Click **Sign into each app separately instead**.

2 From the Skype login window, click **Sign up for a Microsoft Account**.

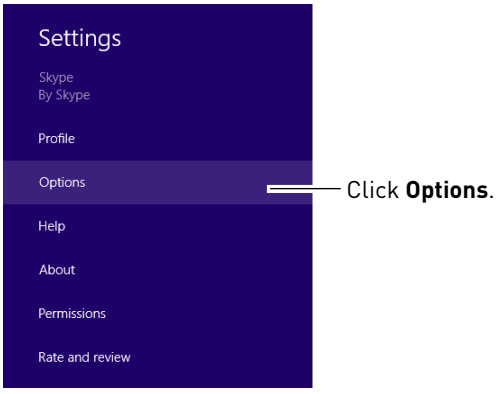
3 Follow the on-screen instructions to create a new account for your camera and log in.

Step 2 of 4: Configuring Skype

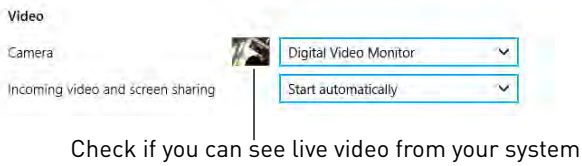
1 Move the mouse pointer to the upper-right corner of your monitor. Click the **Settings** icon on the right side of the monitor.



2 Click **Options**.



3 Check if you can see live video from your system. Video from your camera is shown next to the **Camera** entry.

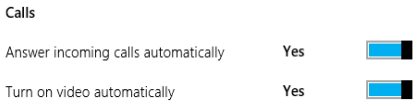


NOTE: If you can see an image from a webcam that is already connected to your computer, select **Wireless Monitoring System** from the drop-down menu.

4 Configure the following:

- Under **Who can call you?**, select **Only my contacts**. This will prevent the camera from accepting calls from anyone who is not in the contact list for its account.

- Ensure that **Answer incoming calls automatically** and **Turn on video automatically** are both in the **Yes** position.



5 Left-click outside the settings panel to save your changes.

Step 3 of 4: Send a contact request

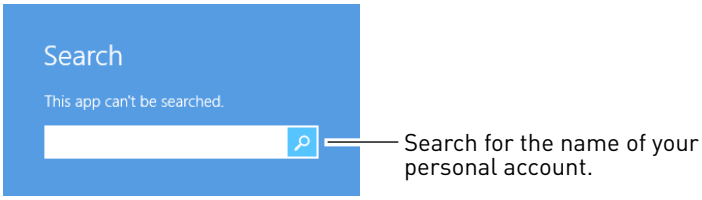
Next, you have to send a contact request from the camera's account to your personal account.

1 Right-click anywhere on the Skype window. Two menus will appear on the top and bottom of the screen.

2 Click the **Add Contact** button (

) on the bottom of the screen. A search bar appears.

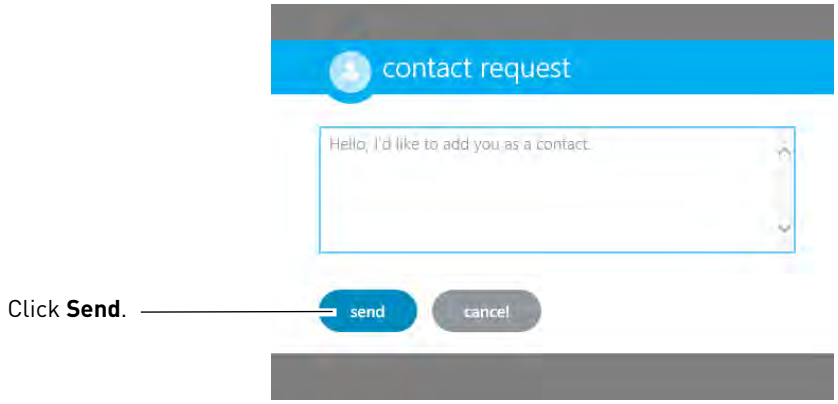
3 Search for the name of your personal Microsoft account (e.g., tom.smith@live.com).



4 Double-click on your profile and click the **Add to Contacts** button (

).

5 The **Contact Request** dialog box appears. Click the **Send** button (send).

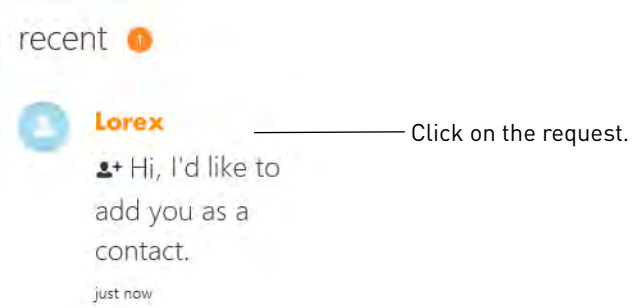


Step 4 of 4: Test the connection

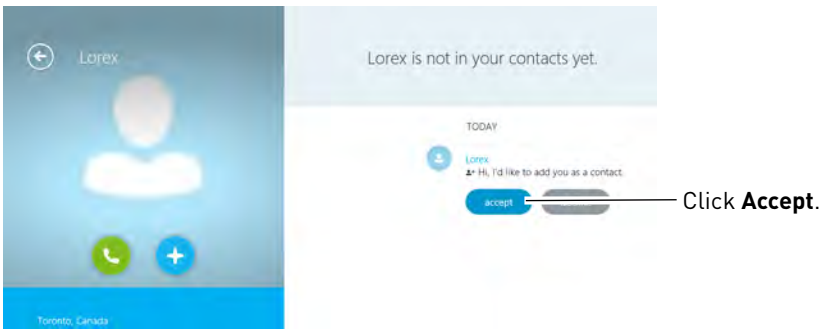
NOTE: This step requires you to log in to Skype from a **different computer** or **compatible mobile device**.

1 Log in to the Skype app using your personal Microsoft account (enter the e-mail address for your Microsoft account).

2 A contact request from the camera's account appears. Click on the request.



3 Click the **Accept** button (accept).



4 Click the Call button ( ).

The video call begins automatically. Please allow around 15 to 25 seconds for the video connection to be established.

NOTE: Video may appear pixelated immediately after connecting. It should improve within a few seconds, depending on your Internet connection.

Changing the camera view on Skype

NOTE: This section is applicable only if you have more than 1 camera.
You cannot change the camera remotely using Skype; however, you can change the camera that is shown on Skype manually using the video monitor.

Pair the camera that is most important for you to view remotely to Channel 1. When you connect the USB cable to the video monitor, the video monitor defaults to Camera 1, even if you have a different channel selected.

To change the camera view:

1 With the wireless receiver connected to your computer using a USB cable, press **UP/DOWN** to change the channel that is shown when a remote user connects through Skype.

NOTE: You can only view one camera at a time.

Viewing a camera on your smart phone or tablet

You can remotely monitor your camera using Skype on supported smart phones or tablets.

Supported apps & devices

For the latest device compatibility list, visit www.lorextechnology.com.

iPhone / iPad / iPod touch

- Skype for iPhone v. 3.0 and above
- Skype for iPad v. 3.5 and above
- iPhone 5/4S/4/3GS, iPad (1st generation and above), iPod touch (3rd generation and above)
- iOS 4.0 and above

Android

- Skype v. 2.8 and above
- Android v. 2.3 and above

Prerequisites

- Install and configure the PC Skype software and USB drivers. For details, see "Viewing your camera remotely using Skype™" on page 38.
- Ensure the video monitor is connected to your computer with the USB cable.
- Ensure you have configured your camera's Skype account to auto-accept incoming calls.
- Ensure your personal Skype account has been added to the contact list for the video monitor's Skype account.

Viewing your camera on iPhone

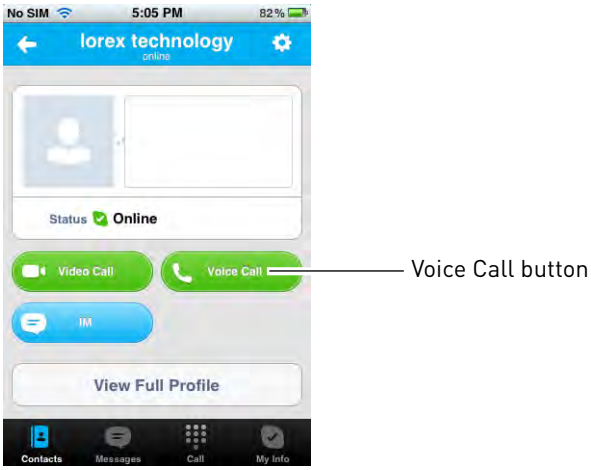
1 Download and install the Skype application from the App Store.

NOTE: Skype is a free application, but it requires a valid iTunes account to download.

2 Launch Skype and sign in using your personal account. Your contact list opens to All Contacts. If a different contact list is open, tap **Contacts** and then tap **All Contacts**.

3 Select the video monitor's account, and tap **Voice Call** to connect to the camera. The video call connects automatically. Please allow 15 to 25 seconds for the call to connect.

NOTE: Video may appear pixelated immediately after connecting. It should improve within a few seconds, depending on your Internet connection.



Viewing your camera on iPad

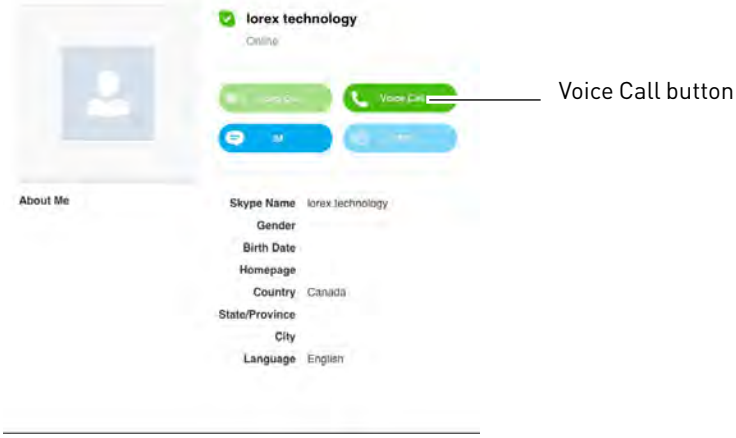
1 Download and install the Skype for iPad application from the App Store.

NOTE: Skype for iPad is a free application, but it requires a valid iTunes account to download.

2 Launch Skype and sign in using your personal account. Your contact list opens to All Contacts. If a different contact list is open, tap **Lists** ( ) and then tap **All Contacts**.

3 Select the video monitor's account, and tap **Voice Call** to connect to the camera. The video call connects automatically. Please allow 15 to 25 seconds for the call to connect.

NOTE: Video may appear pixelated immediately after connecting. It should improve within a few seconds, depending on your Internet connection.



Viewing your camera on an Android smartphone or tablet

1 Download and install the Skype application from the Google Play Store.

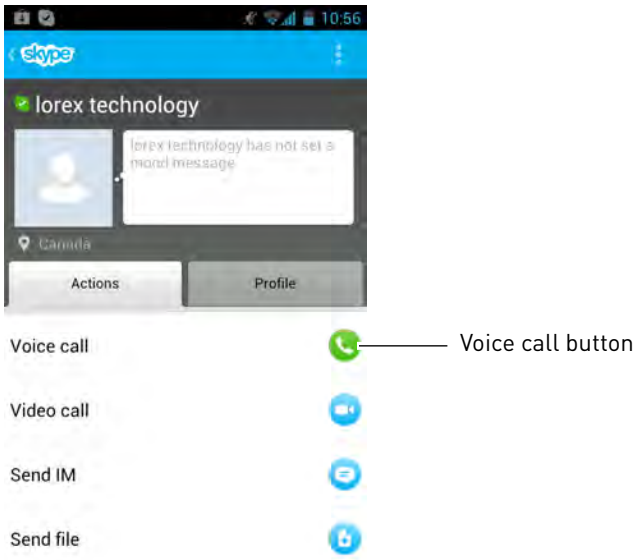
NOTE: Skype is a free application.

2 Launch Skype and sign using your personal account.

3 Tap **Contacts**.

4 Tap the name of the video monitor's account, and tap **Voice Call** to connect to the camera. The video call connects automatically. Please allow 15 to 25 seconds for the call to connect.

NOTE: Video may appear pixelated immediately after connecting. It should improve within a few seconds, depending on your Internet connection.



Technical specifications

General

Description	Specification
Transmission Frequency	2,400~2,483.5MHz
Transmission Power	16dBm
Unobstructed Effective Range	492ft / 150m (line of sight)
Spread Spectrum	FHSS
Modulation Mode	GFSK
Operating Temperature	14 ~ 104° Fahrenheit / -10 ~ 40° Celsius
Operating Humidity	< 85%

Camera

Description	Specification
Image Sensor	1/4" CMOS Image Sensor
Resolution	720 x 480pxl (NTSC)
Minimum Illumination	< 5Lux (IR on) / > 30Lux (IR off)
Night Vision Distance	33ft (10m)
PIR Range	21ft (6.5m)
View Angle	Diagonal 64°
Power Consumption (Max.)	Max 460mA (IR on) Max 240mA (IR off)
Power Supply	9V DC 600mA ±5%
Dimensions	W: 75mm, L: 110mm, H: 190mm
Weight	0.60lbs / 0.27kg

LCD receiver

Description	Specification
Display	9" diagonal or 7" diagonal (check package for display size)
LCD Resolution	800x480
Receiving Sensitivity	-81dBm
Power Consumption (Max.)	7" Model: Max 950mA 9" Model: Max 1050mA
Power Supply	5V DC 2A ±5%
Dimensions	7" Model: W: 42mm, L: 201mm, H: 150mm 9" Model: W: 42mm, L: 254mm, H: 202mm
Weight	7" Model: 1.55lbs / 0.70kg 9" Model: 1.00lbs / 0.44kg

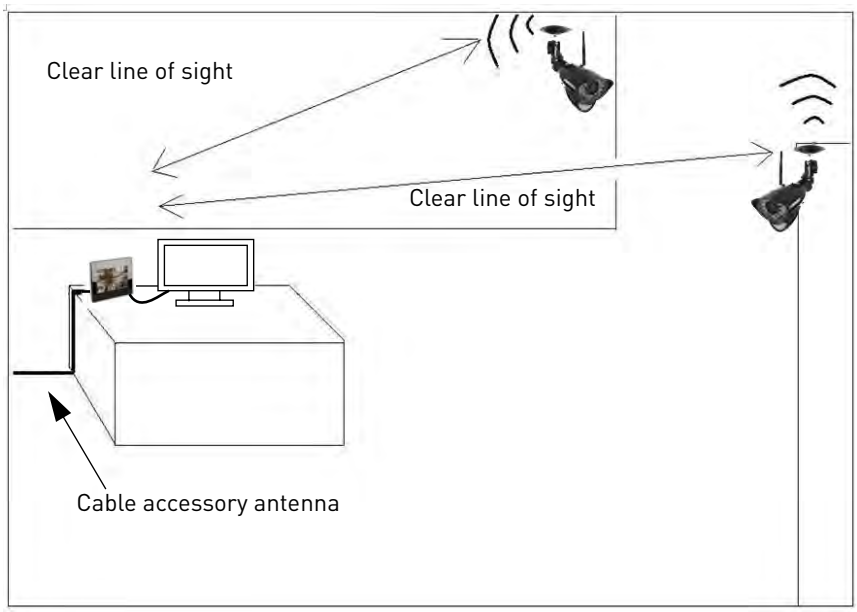
Strengthening the range of the wireless signal

DISCLAIMER: Certain accessories are not available in all markets.

There are several ways to boost your wireless signal as well as options to help you extend the range of the wireless signal.

Clear line-of-sight

The digital wireless signal is virtually interference free. However, you should always ensure there is a clear line-of-sight between the camera and the receiver.



Obstacles

There should be little to no obstacles obstructing the line-of-sight between the camera and the receiver. Solid objects, such as concrete and metal may limit the range of the wireless signal.

Extending your wireless signal

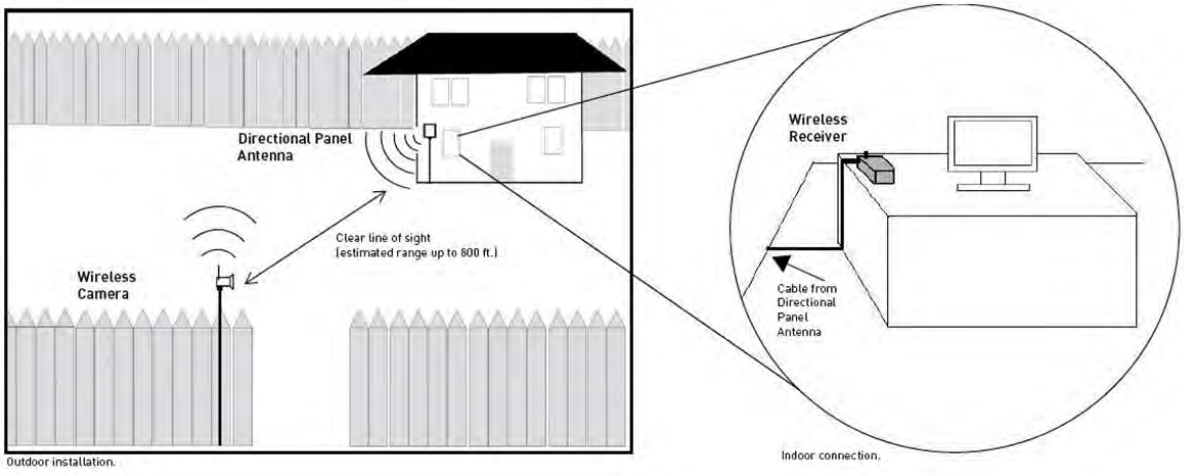
Even with a clear line-of-sight between your camera(s) and your receiver, you may experience a lower video frame rate simply due to the distance between your wireless devices.

Accessory antennas are available that can help extend the range of your wireless signal.

2.4 GHZ Directional Wireless Panel Antenna

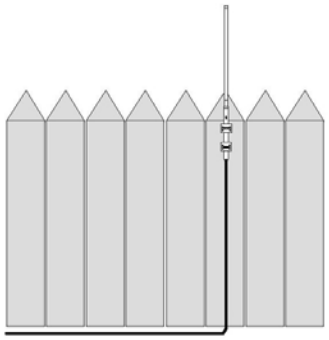
Use the 2.4GHz Directional Wireless Panel Antenna (model #: **ACCANTD9**) to focus a wireless signal onto one specific camera in order to increase range of transmission (clear line-of-sight between the camera and the antenna is required). A 20ft extension cable is included help with proper position of the antenna.

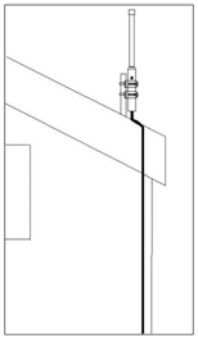
Directional Wireless Panel Antenna



2.4 GHZ Omni-Directional Wireless Antenna

Use the 2.4GHz Omni-Directional Wireless Antenna (model #: **ACCANTO8**) to extend the range and boost the signal of several wireless cameras. You should position the Omni-Directional Wireless Antenna in an elevated position to provide a clear line-of-sight to the cameras. A 20ft extension cable is included help with proper position of the antenna.





Visit www.lorextechnology.com for more details on wireless antennas and accessories.

Power failure indicator

A power failure may interrupt recording modes on the system. After power is restored, the following will occur:

- The system will restart in **Auto Sequence mode + Motion Recording** - this ensures that some form of recording will be immediately active on the system.

NOTE: If you had a different display view or recording mode set when the power failure occurred, you will need to re-apply the previous display view and recording mode.

- A Power Failure icon ( ) appears on-screen. The Power Failure icon indicates that a power failure occurred **while the system was actively recording** (i.e. "REC" icon was on-screen).

NOTE: The icon appears only if the system was actively recording when the power failure occurred. The icon will disappear when you press buttons on the receiver.

NOTE: Video files are saved every 10 minutes of recording. If a power failure occurs during recording, recordings from up to 10 minutes before the power failure occurred will not be saved.

Mounting the LCD receiver

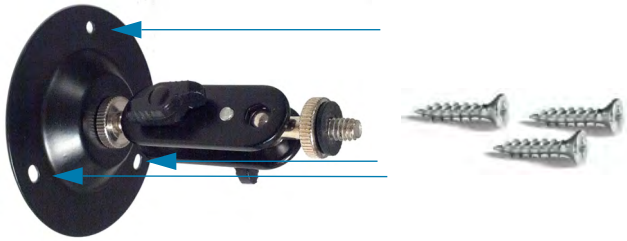
The LCD Receiver can mounted to a wall or underneath a counter or cupboard.

To mount the LCD receiver:

1 Select a location to mount the receiver. The location should have a clear reception to your camera(s). Place the mounting stand in the desired mounting position and mark holes for the screws.

NOTE: Avoid installing in a location which requires the wireless signal to pass through cement, concrete, and metal structures. This will reduce the range of transmission.

2 Drill the holes, and then mount the stand to the desired surface using the provided screws. Make sure all three screws are fastened tightly at the connection points.



3 Adjust the antenna on the LCD receiver to allow for proper clearance with your mounting surface.

4 Attach the LCD receiver to the mounting stand. Adjust the position of the LCD receiver, and then tighten the thumbscrews to secure.

Troubleshooting

Problem	Solution
There is no picture from a Camera	• Check power to the camera • Make sure that the cameras and receiver are both ON • Make sure that the camera is in range of the receiver
The picture is dropping	• Move the camera closer to the receiver • Try repositioning the camera, receiver or both to improve the reception
The Picture is or has become choppy	• The picture may become choppy when experiencing a lower frame rate due to reduced signal strength (i.e. 10 frames per second vs. a higher 20 frames per second) • Try moving the camera closer to the receiver • Remove obstructions between the receiver and camera • Consider increasing the range of the wireless signal with an accessory antenna (see page 57 for details)
The Picture is white	• Common situation know as "washout" or "whitewash" where a strong light source is pointed at the camera lens. The camera lens IS NOT harmed during a whitewash • DO NOT point your camera towards a light source
Bright spot in image while viewing camera at night	• This occurs when a camera is pointed at a window to see outside, because the night vision LED's produce Infrared light that reflects off the glass. If you need to look outside, install the camera outdoors. Please note that the camera **must** be installed under shelter when placed outdoors
The Picture appears to be grainy/distorted	• When using with large screen TV/monitor (especially high-definition televisions), the picture might be grainy as the camera limits video resolution to VGA (640x480 pixels). This is not a product defect • For best performance use with TV/monitor PIP (Picture in Picture) function. Check your TV/monitor product manual to see if this feature is available on your TV/monitor • Use with a smaller TV/monitor
Cannot access the menu	• You cannot access the menu while recording is on: • Press to disable manual or scheduled recording • Press to disable motion recording
"Err" appears on the on-screen display	• The system has encountered an error with the SD card. Power off the receiver, remove then re-insert the SD card, and then power the receiver back on • If "Err" still appears on the OSD, format the SD card

Problem	Solution
LCD display appears to be off.	• The system is in AV mode, which is used to view your cameras on an external monitor or television. Press the AV button to return to normal viewing mode.

Frequently asked questions

Q: Can I extend the wireless range of the receiver?

A: Yes. There are optional antennas available at www.lorextechnology.com that help boost wireless signals.

Q: What is the maximum distance I can have between the camera and the receiver?

A: Typically 650 feet (200m) with a clear line of sight in open space, or approximately 180 feet (55m) in a house. Walls, studs, furniture will interfere with the range of wireless transmission. Try repositioning the camera and/or monitor to achieve optimal signal strength.

Q: Is the signal secure?

A: Yes. The Digital Wireless signal transmission type used by the receiver is also known as FHSS- Frequency Hopping Spread Spectrum. This type of signal is highly resistant to deliberate jamming as it generates a channel hopping sequence using a sophisticated algorithm generated by the receiver system.

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